

# BSE

Brienen Structural Engineers, P.S.

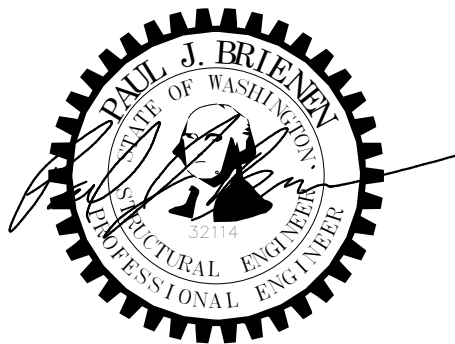
Page 1

Received  
Development Services  
January 19, 2021  
CITY OF PUYALLUP

THE APPROVED CONSTRUCTION PLANS AND  
ALL ENGINEERING MUST BE POSTED ON THE  
JOB AT ALL INSPECTIONS IN A VISIBLE AND  
READILY ACCESSIBLE LOCATION.

South Hill Mall  
3500 S Meridian St  
Puyallup, WA 98373

## Voluntary Seismic Upgrade Structural Calculations



Project Number 20474  
1/7/2020



**B**rien **S**tructural **E**ngineers, P.S.

## Calculation Index

Basis of Design	Page 3
Lateral Analysis	Page 4
Wall Calculations	Page 378
Panel Connection Designs	Page 411
Panel Base Connection	Page 447
Diaphragm Analysis	Page 454
Mechanical Unit Design	Page 501

## BASIS OF DESIGN

### Structural Basis of Design

The purpose of this structural design is to bring the east structure into conformance with the 2015 International Building Code as adopted and amended by the City of Puyallup. The original structure was constructed in 1993 and designed according to the 1988 Uniform Building Code. We consider the original building's design to be substantially conforming to current 2015 IBC design requirements with the exception of some seismic provisions. The design also includes adding roof structural members to support new mechanical roof top units.

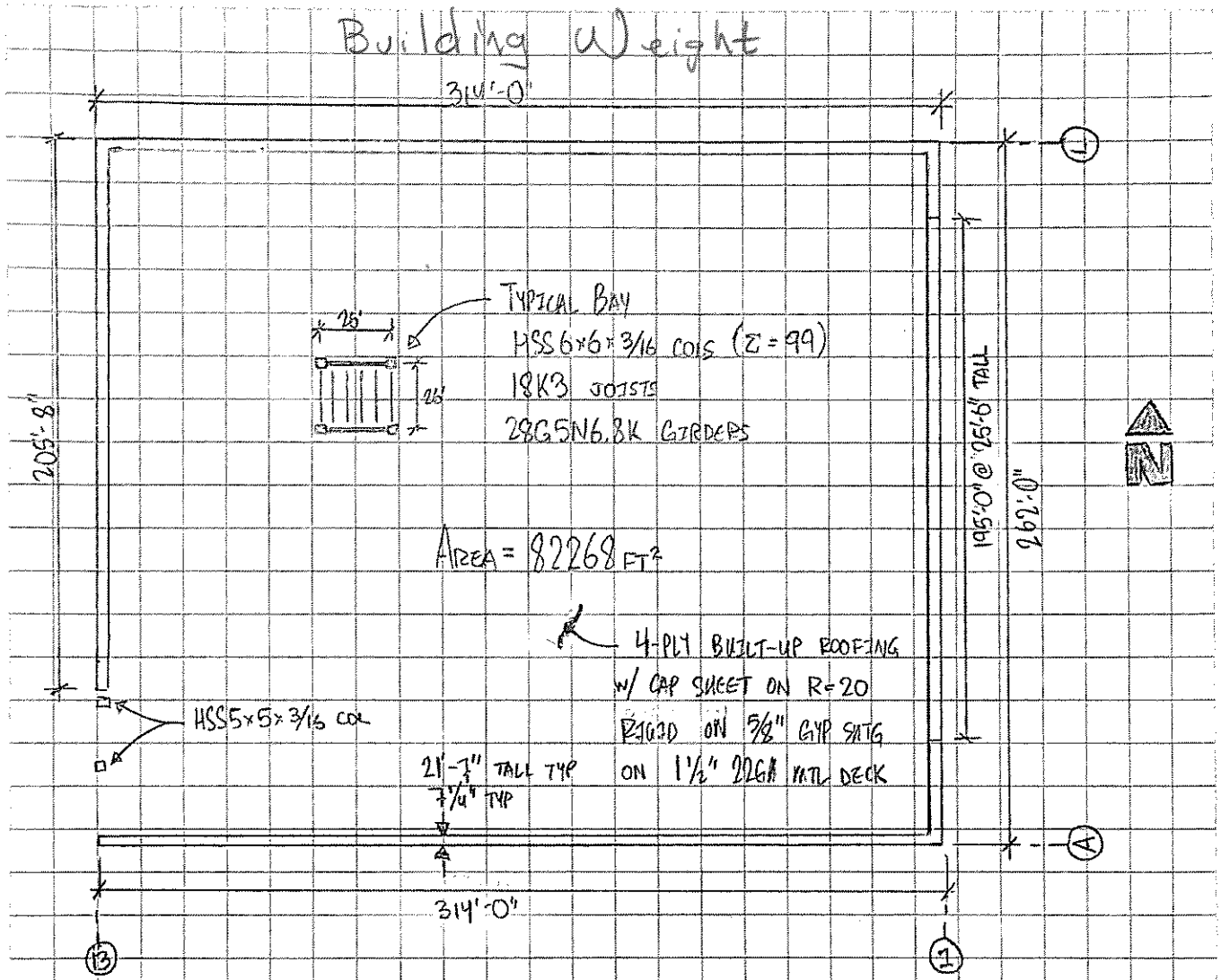
We analyzed the existing structure utilizing ETABS computer software. This incorporates a 3-dimensional finite element model of the building. The seismic design loads utilized in the analysis conform to the IBC 2015 for new buildings. The analysis determined that most of the tilt panel foundation connections and panel to panel connections were over stressed. This comes from additional code developments that have substantially increased loads on such connections in recent years. All other aspects of the structure essentially meet the strength provisions of the 2015 IBC although we have requested in situ test on diaphragm anchorage and concrete strength.

The existing tilt panel foundation connections are extremely challenging and expensive to strengthen. Thus, our approach was to couple the tilt panel together by adding connection plates. Once coupled together the walls segments behave as much longer wall panels and reduce the foundation tension forces such that they meet the requirements of the 2015 IBC. By coupling the walls together, the building drift is also reduced which is structurally advantageous.

The panel concrete stresses were all in conformance with the 2015 IBC thus the only strengthening required are the connection plates.

## **LATERAL ANALYSIS**





## SEISMIC WEIGHTS

JOISTS → 18K3 =  $(6.6 \text{ LBS/FT}) (314 \text{ FT LONG}) (49 \text{ ROWS}) = 101548 \text{ LBS}$

GIRDERS → 28G5N6.8K =  $(19.0 \text{ LBS/FT}) (262 \text{ FT LONG}) (11 \text{ ROWS}) = 54758 \text{ LBS}$

COLUMNS → HSS 6x6 x 3/16 =  $(14.53 \text{ LBS/FT}) (21 \text{ FT TALL}) (101 \text{ COLS}) = 30818 \text{ LBS}$

WALLS → 7 1/4" TILT CONC =  $(150 \text{ PCF}) (7.25 \text{ IN}) (\frac{1 \text{ FT}}{12 \text{ IN}}) [(21.58 \text{ FT TALL}) (1095.68 \text{ FT LONG}) - (2.92 \text{ FT TALLER}) (195 \text{ FT LONG})] = 2212081 \text{ LBS}$   
 { w/DANGS = 2085883 LBS }

ROOF →  $(82268 \text{ FT}^2) [(2.5 \text{ PSF 4-PLY BU}) + (3 \text{ PSF R20 RIGID}) + (2.5 \text{ PSF GYP}) + (2 \text{ PSF 22GA MTL}) + (1 \text{ PSF MEP}) + (4 \text{ PSF CEILING})] = 1234020 \text{ LBS}$

Brien Structural Engineers, P.S.

## SEISMIC MASS - (in psf)

Roof -

$$\text{Joists} = 6.6 \text{ PLF} / 5.2' = 1.3 \text{ psf}$$

$$\text{Girders} = 19.0 \text{ PLF} / 26' = 0.7 \text{ psf}$$

$$\text{Bridging} = \quad = 6.1 \text{ psf}$$

$$\frac{1}{2} \text{ Cols} = 10' (14.5 \text{ PLF}) / 26 \times 26 = 0.2 \text{ psf}$$

$$\text{Roof Deck} = \quad = 2.0 \text{ psf}$$

$$\text{Roofing} = 4 \text{ ply BO} = 2.5 \text{ psf}$$

$$\text{INSULATION} = \text{R20 Rigid} = 3 \text{ psf}$$

$$\text{GYP} = \quad = 2.5 \text{ psf}$$

$$\text{CEILING} = \quad = 4 \text{ psf}$$

$$\text{MEP} = \quad = \underline{1 \text{ psf}}$$

$$\underline{\underline{17.3 \text{ psf}}}$$

$$\text{TOTAL ROOF WT} = 17.3 \text{ psf} \times 82268 \text{ sq ft} = 142.3 \text{ K}$$

Wall Weights -

$$\text{GRID L} = \left[ \frac{1}{2}(20') + 1.5' \right] \left( \frac{7\frac{1}{4}''}{12} \right) (150 \text{ pcf}) (314 \text{ LF}) = 329 \text{ K}$$

$$\text{GRID A} = \quad " \quad " \quad " \quad " \quad = 327 \text{ K}$$

$$\text{GRID B} = \quad " \quad " \quad " \quad (206') = 215 \text{ K}$$

$$\text{GRID 1} = \quad " \quad " \quad " \quad (262) = 273 \text{ K}$$

$$\text{GRID 1 POPUP} = 3.5' \left( \frac{7\frac{1}{4}''}{12} \right) (150 \text{ pcf}) (195') = 62 \text{ K}$$

$$\text{TOTAL TRIB WALL WT} = 1204 \text{ K} / 82268 = 14.6 \text{ psf}$$

TOTAL SEISMIC MASS =

$$\text{Roof} = 142 \text{ K} = 17.3 \text{ psf}$$

$$\text{Walls} = 1204 \text{ K} = 14.6 \text{ psf}$$

$$\text{TOTAL} = 1346 \text{ K} = 31.9 \text{ psf}$$

$$\text{W} = \underline{\underline{2624 \text{ K}}}$$

## ASCE 7-10 BASE SHEAR CALC

$R=4$  Intermediate precast walls  $\Delta=2.5$

$I=1.25$

$W=1346^k$

Site Class - D

$S_s=1.248$

$S_1=0.48$

$S_{M3}=1.248$

$S_{M1}=0.73$

$S_{D3}=0.833$

$S_{D1}=0.496$

$$C_s = \frac{S_{D3}}{R} I = \frac{0.833}{4} (1.25) = 0.260$$

$$V = C_s W = 0.26 (2624^k) = \underline{\underline{682^k}}$$

The building has no Irregularities

Equivalent lateral force procedure will be used



# South Hill Mall

3500 S Meridian Suite 900, Puyallup, WA 98373, USA

Latitude, Longitude: 47.1573499, -122.3005397



Date	12/10/2020, 8:42:46 AM
Design Code Reference Document	ASCE7-10
Risk Category	III
Site Class	D - Stiff Soil

Type	Value	Description
$S_S$	1.248	$MCE_R$ ground motion. (for 0.2 second period)
$S_1$	0.48	$MCE_R$ ground motion. (for 1.0s period)
$S_{MS}$	1.249	Site-modified spectral acceleration value
$S_{M1}$	0.73	Site-modified spectral acceleration value
$S_{DS}$	0.833	Numeric seismic design value at 0.2 second SA
$S_{D1}$	0.486	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
$F_a$	1.001	Site amplification factor at 0.2 second
$F_v$	1.52	Site amplification factor at 1.0 second
PGA	0.5	$MCE_G$ peak ground acceleration
$F_{PGA}$	1	Site amplification factor at PGA
$PGA_M$	0.5	Site modified peak ground acceleration
$T_L$	6	Long-period transition period in seconds
$SsRT$	1.248	Probabilistic risk-targeted ground motion. (0.2 second)
$SsUH$	1.254	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
$SsD$	1.5	Factored deterministic acceleration value. (0.2 second)
$S1RT$	0.48	Probabilistic risk-targeted ground motion. (1.0 second)
$S1UH$	0.501	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
$S1D$	0.6	Factored deterministic acceleration value. (1.0 second)
$PGA_d$	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
$C_{RS}$	0.995	Mapped value of the risk coefficient at short periods
$C_{R1}$	0.958	Mapped value of the risk coefficient at a period of 1 s



# South Hill Mall

3500 S Meridian Suite 900, Puyallup, WA 98373, USA

Latitude, Longitude: 47.1573499, -122.3005397



Date	12/10/2020, 3:41:57 PM
Design Code Reference Document	ASCE41-13
Custom Probability	
Site Class	D - Stiff Soil

Type	Description	Value
Hazard Level		BSE-2N
S <sub>s</sub>	spectral response (0.2 s)	1.248
S <sub>1</sub>	spectral response (1.0 s)	0.48
S <sub>XS</sub>	site-modified spectral response (0.2 s)	1.249
S <sub>X1</sub>	site-modified spectral response (1.0 s)	0.73
F <sub>a</sub>	site amplification factor (0.2 s)	1.001
F <sub>v</sub>	site amplification factor (1.0 s)	1.52
ssuh	max direction uniform hazard (0.2 s)	1.254
crs	coefficient of risk (0.2 s)	0.995
ssrt	risk-targeted hazard (0.2 s)	1.248
ssd	deterministic hazard (0.2 s)	1.5
s1uh	max direction uniform hazard (1.0 s)	0.501
cr1	coefficient of risk (1.0 s)	0.958
s1rt	risk-targeted hazard (1.0 s)	0.48
s1d	deterministic hazard (1.0 s)	0.6

Type	Description	Value
Hazard Level		BSE-1N
S <sub>XS</sub>	site-modified spectral response (0.2 s)	0.833
S <sub>X1</sub>	site-modified spectral response (1.0 s)	0.486

Type	Description	Value
Hazard Level		BSE-2E
$S_s$	spectral response (0.2 s)	0.895
$S_1$	spectral response (1.0 s)	0.348
$S_{XS}$	site-modified spectral response (0.2 s)	1.022
$S_{X1}$	site-modified spectral response (1.0 s)	0.593
$f_a$	site amplification factor (0.2 s)	1.142
$f_v$	site amplification factor (1.0 s)	1.704

Type	Description	Value
Hazard Level		BSE-1E
$S_s$	spectral response (0.2 s)	0.473
$S_1$	spectral response (1.0 s)	0.171
$S_{XS}$	site-modified spectral response (0.2 s)	0.672
$S_{X1}$	site-modified spectral response (1.0 s)	0.361
$F_a$	site amplification factor (0.2 s)	1.422
$F_v$	site amplification factor (1.0 s)	2.118

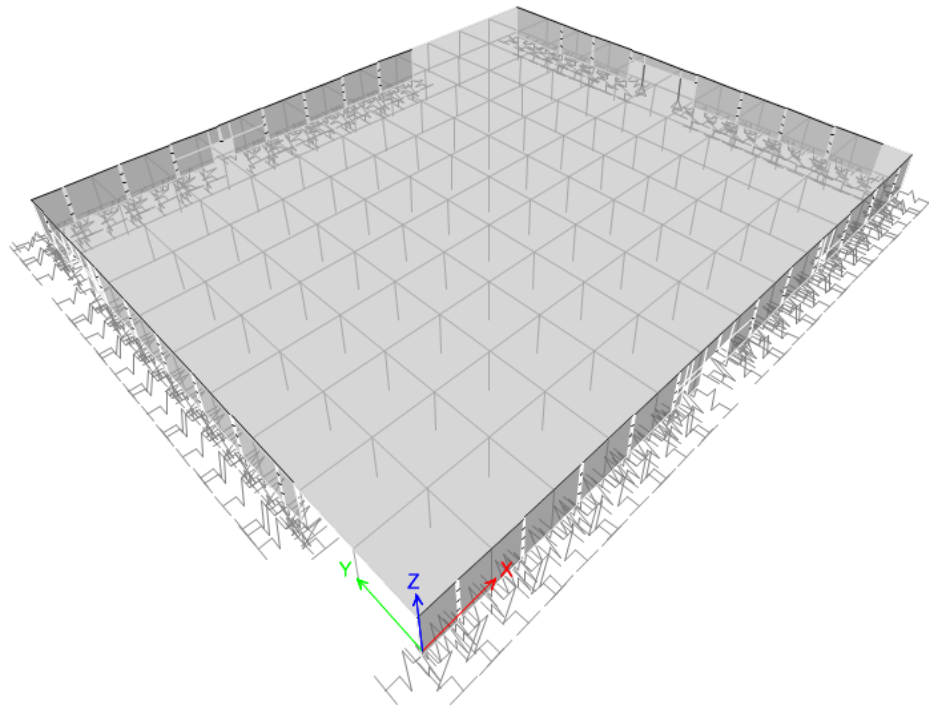
Type	Description	Value
Hazard Level		TL Data
T-Sub-L	Long-period transition period in seconds	6

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# ETABS<sup>®</sup>

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## Project Report

Model File: test, Revision  
1/7/2021

B-19-1101



# Table of Contents

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1. Structure Data	4
1.1 Story Data	4
1.2 Grid Data	4
1.3 Point Coordinates	4
1.4 Line Connectivity	14
1.5 Area Connectivity	17
1.6 Mass	23
1.7 Groups	24
2. Properties	25
2.1 Materials	25
2.2 Frame Sections	25
2.3 Shell Sections	27
2.4 Reinforcement Sizes	27
2.5 Links	27
2.6 Spring Properties	27
2.7 Tendon Sections	28
3. Assignments	29
3.1 Joint Assignments	29
3.2 Frame Assignments	42
3.3 Shell Assignments	54
4. Loads	59
4.1 Load Patterns	59
4.2 Auto Seismic Loading	59
4.3 Applied Loads	66
4.3.1 Line Loads	66
4.4 Functions	71
4.4.1 Response Spectrum Functions	71
4.4.2 Time History Functions	73
4.5 Load Cases	73
4.6 Load Combinations	73
5. Analysis Results	76
5.1 Structure Results	76
5.2 Story Results	76

## Table of Contents

---

5.3 Line Results	77
5.4 Area Results	291
5.5 Modal Results	366

## 1 Structure Data

This chapter provides model geometry information, including items such as story levels, point coordinates, and element connectivity.

### 1.1 Story Data

**Table 1.1 - Story Definitions**

Tower	Name	Height ft	Master Story	Similar To	Splice Story	Color
T1	Story1	20	Yes	None	No	Blue

### 1.2 Grid Data

**Table 1.2 - Grid Definitions - General**

Tower	Name	Type	Ux ft	Uy ft	Rz deg	Story Range	Bubble Size in	Color
T1	G1	Cartesian	0	0	0	Default	60	Gray6

**Table 1.3 - Grid Definitions - Grid Lines**

Name	Grid Line Type	ID	Ordinate ft	Bubble Location	Visible
G1	X (Cartesian)	13	-1	End	Yes
G1	X (Cartesian)	12	26	End	Yes
G1	X (Cartesian)	11	52	End	Yes
G1	X (Cartesian)	10	78	End	Yes
G1	X (Cartesian)	9	104	End	Yes
G1	X (Cartesian)	8	130	End	Yes
G1	X (Cartesian)	7	156	End	Yes
G1	X (Cartesian)	6	182	End	Yes
G1	X (Cartesian)	5	208	End	Yes
G1	X (Cartesian)	4	234	End	Yes
G1	X (Cartesian)	3	260	End	Yes
G1	X (Cartesian)	2	286	End	Yes
G1	X (Cartesian)	1	313	End	Yes
G1	Y (Cartesian)	A	-1	Start	Yes
G1	Y (Cartesian)	B	26	Start	Yes
G1	Y (Cartesian)	C	52	Start	Yes
G1	Y (Cartesian)	D	78	Start	Yes
G1	Y (Cartesian)	E	104	Start	Yes
G1	Y (Cartesian)	F	130	Start	Yes
G1	Y (Cartesian)	G	156	Start	Yes
G1	Y (Cartesian)	H	182	Start	Yes
G1	Y (Cartesian)	J	208	Start	Yes
G1	Y (Cartesian)	K	234	Start	Yes
G1	Y (Cartesian)	L	261	Start	Yes

## 1.3 Point Coordinates

Table 1.4 - Point Bays

Label	Is Auto Point	X ft	Y ft	DZBelow ft
1	No	-1	169.5	0
2	No	11.5	-1	0
3	No	-1	261	0
4	No	-1	170.5	0
5	No	26	261	0
6	No	313	38.5	0
7	No	313	39.5	0
8	No	-1	194.5	0
9	No	12.5	261	0
10	No	13.5	261	0
11	No	313	65.5	0
12	No	313	37.5	0
13	No	221.5	-1	13
14	No	-1	168.5	0
15	No	-1	144.5	0
16	No	-1	143.5	0
17	No	-1	142.5	0
18	No	313	64.5	0
19	No	-1	117.5	0
20	No	52	261	0
21	No	313	261	0
22	No	-1	116.5	0
23	No	-1	92.5	0
24	No	169.5	-1	0
25	No	-1	91.5	0
26	No	130	261	0
27	No	156	261	0
28	No	194.5	-1	0
29	No	38.5	261	0
30	No	182	261	0
31	No	220.5	-1	0
32	No	313	-1	0
33	No	208	261	0
34	No	-1	182	0
35	No	-1	156	0
36	No	-1	130	0
37	No	313	13.5	0
38	No	313	90.5	0
39	No	313	91.5	0
40	No	221.5	-1	0
41	No	313	119.5	0
42	No	313	166.5	0
43	No	313	194.5	0
44	No	313	220.5	0

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
45	No	-1	-1	0
46	No	65.5	261	0
47	No	39.5	261	0
48	No	313	14.5	0
49	No	313	36.5	0
50	No	246.5	-1	0
51	No	313	63.5	0
52	No	313	66.5	0
53	No	313	89.5	0
54	No	313	92.5	0
55	No	313	167.5	0
56	No	117.5	261	0
57	No	142.5	261	0
58	No	-1	90.5	0
59	No	168.5	261	0
60	No	169.5	261	0
61	No	194.5	261	0
62	No	313	193.5	0
63	No	-1	65.5	0
64	No	220.5	261	0
65	No	195.5	261	0
66	No	-1	64.5	0
67	No	313	222.5	0
68	No	313	221.5	0
69	No	313	196.5	0
70	No	313	195.5	0
71	No	247.5	-1	0
72	No	272.5	-1	0
73	No	273.5	-1	0
74	No	298.5	-1	0
75	No	313	118.5	0
76	No	12.5	261	5
77	No	13.5	261	5
78	No	12.5	261	10
79	No	13.5	261	10
80	No	12.5	261	15
81	No	13.5	261	15
82	No	-1	64.5	5
83	No	-1	65.5	5
84	No	38.5	261	5
85	No	39.5	261	5
86	No	38.5	261	10
87	No	39.5	261	10
88	No	38.5	261	15
89	No	39.5	261	15

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
90	No	142.5	261	5
91	No	-1	64.5	10
92	No	142.5	261	10
93	No	-1	65.5	10
94	No	143.5	261	0
95	No	143.5	261	5
96	No	143.5	261	10
97	No	142.5	261	15
98	No	143.5	261	15
99	No	168.5	261	5
100	No	169.5	261	5
101	No	168.5	261	10
102	No	169.5	261	10
103	No	168.5	261	15
104	No	169.5	261	15
105	No	194.5	261	5
106	No	195.5	261	5
107	No	194.5	261	10
108	No	195.5	261	10
109	No	194.5	261	15
110	No	195.5	261	15
111	No	-1	64.5	15
112	No	-1	65.5	15
113	No	-1	90.5	5
114	No	-1	91.5	5
115	No	-1	90.5	10
116	No	-1	91.5	10
117	No	-1	90.5	15
118	No	-1	91.5	15
119	No	-1	116.5	5
120	No	-1	117.5	5
121	No	-1	116.5	10
122	No	-1	117.5	10
123	No	-1	116.5	15
124	No	-1	117.5	15
125	No	-1	142.5	5
126	No	-1	143.5	5
127	No	-1	142.5	10
128	No	-1	143.5	10
129	No	-1	142.5	15
130	No	-1	143.5	15
131	No	-1	168.5	5
132	No	-1	169.5	5
133	No	-1	168.5	10
134	No	-1	169.5	10

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
135	No	-1	168.5	15
136	No	-1	169.5	15
137	No	13.5	-1	0
138	No	14.5	-1	0
139	No	39.5	-1	0
140	No	40.5	-1	0
141	No	65.5	-1	0
142	No	66.5	-1	0
143	No	91.5	-1	0
144	No	92.5	-1	0
145	No	-1	104	0
146	No	313	219.5	0
147	No	313	259	0
148	No	13.5	-1	5
149	No	-1	78	0
150	No	13.5	-1	10
151	No	26	-1	0
152	No	13.5	-1	15
153	No	52	-1	0
154	No	39.5	-1	5
155	No	78	-1	0
156	No	39.5	-1	10
157	No	104	-1	0
158	No	39.5	-1	15
159	No	182	-1	0
160	No	65.5	-1	5
161	No	208	-1	0
162	No	65.5	-1	10
163	No	234	-1	0
164	No	65.5	-1	15
165	No	260	-1	0
166	No	91.5	-1	5
167	No	286	-1	0
168	No	91.5	-1	10
169	No	313	26	0
170	No	91.5	-1	15
171	No	313	52	0
172	No	170.5	-1	0
173	No	313	78	0
174	No	313	37.5	5
175	No	313	38.5	5
176	No	195.5	-1	0
177	No	196.5	-1	0
178	No	313	37.5	10
179	No	1	-1	0

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
180	No	313	38.5	10
181	No	12.5	-1	0
182	No	313	104	0
183	No	38.5	-1	0
184	No	313	182	0
185	No	64.5	-1	0
186	No	313	208	0
187	No	313	37.5	15
188	No	313	233.5	0
189	No	313	38.5	15
190	No	116.5	-1	0
191	No	90.5	-1	0
192	No	1	261	0
193	No	11.5	261	0
194	No	14.5	261	0
195	No	37.5	261	0
196	No	40.5	261	0
197	No	64.5	261	0
198	No	63.5	261	0
199	No	118.5	261	0
200	No	141.5	261	0
201	No	144.5	261	0
202	No	167.5	261	0
203	No	170.5	261	0
204	No	193.5	261	0
205	No	313	244.5	0
206	No	196.5	261	0
207	No	219.5	261	0
208	No	-1	259	0
209	No	90.5	261	0
210	No	-1	193.5	0
211	No	-1	167.5	0
212	No	-1	141.5	0
213	No	-1	118.5	0
214	No	-1	115.5	0
215	No	-1	89.5	0
216	No	-1	66.5	0
217	No	-1	55.5	0
218	No	-1	57.5	0
219	No	-1	63.5	0
220	No	313	64.5	5
221	No	313	65.5	5
222	No	313	64.5	10
223	No	313	65.5	10
224	No	313	64.5	15



Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
225	No	313	65.5	15
226	No	313	90.5	5
227	No	313	91.5	5
228	No	313	90.5	10
229	No	313	91.5	10
230	No	313	90.5	15
231	No	313	91.5	15
232	No	313	194.5	5
233	No	313	195.5	5
234	No	313	194.5	10
235	No	313	195.5	10
236	No	313	194.5	15
237	No	313	195.5	15
238	No	313	220.5	5
239	No	313	221.5	5
240	No	313	220.5	10
241	No	313	221.5	10
242	No	313	220.5	15
243	No	313	221.5	15
244	No	299.5	-1	0
245	No	311	-1	0
246	No	300.5	-1	0
247	No	274.5	-1	0
248	No	248.5	-1	0
249	No	222.5	-1	0
250	No	297.5	-1	0
251	No	271.5	-1	0
252	No	245.5	-1	0
253	No	219.5	-1	0
254	No	193.5	-1	0
255	No	115.5	-1	0
256	No	89.5	-1	0
257	No	63.5	-1	0
258	No	37.5	-1	0
259	No	12.5	-1	5
260	No	12.5	-1	10
261	No	12.5	-1	15
262	No	38.5	-1	5
263	No	38.5	-1	10
264	No	38.5	-1	15
265	No	64.5	-1	5
266	No	64.5	-1	10
267	No	64.5	-1	15
268	No	90.5	-1	5
269	No	90.5	-1	10

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
270	No	90.5	-1	15
271	No	194.5	-1	5
272	No	195.5	-1	5
273	No	194.5	-1	10
274	No	195.5	-1	10
275	No	194.5	-1	15
276	No	195.5	-1	15
277	No	220.5	-1	5
278	No	221.5	-1	5
279	No	220.5	-1	10
280	No	221.5	-1	10
281	No	220.5	-1	15
282	No	221.5	-1	15
283	No	246.5	-1	5
284	No	247.5	-1	5
285	No	246.5	-1	10
286	No	247.5	-1	10
287	No	246.5	-1	15
288	No	247.5	-1	15
289	No	272.5	-1	5
290	No	273.5	-1	5
291	No	272.5	-1	10
292	No	273.5	-1	10
293	No	272.5	-1	15
294	No	273.5	-1	15
295	No	298.5	-1	5
296	No	299.5	-1	5
297	No	298.5	-1	10
298	No	299.5	-1	10
299	No	298.5	-1	15
300	No	299.5	-1	15
301	No	117.5	-1	0
302	No	142.5	-1	0
303	No	143.5	-1	0
304	No	168.5	-1	0
305	No	134	-1	9
306	No	142.5	-1	9
307	No	134	-1	0
308	No	143.5	-1	9
309	No	152	-1	9
310	No	152	-1	0
311	No	118.5	-1	0
312	No	167.5	-1	0
313	No	154	-1	0
314	No	132	-1	0

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
315	No	122	-1	12.5
316	No	125.5	-1	12.5
317	No	125.5	-1	0
318	No	122	-1	0
319	No	91.5	261	0
320	No	116.5	261	0
321	No	64.5	261	5
322	No	225	-1	0
323	No	225	-1	13
324	No	231.5	-1	0
325	No	231.5	-1	13
326	No	-1	195.5	0
327	No	-1	220.5	0
328	No	-1	247.5	0
329	No	-1	248.5	0
330	No	-1	221.5	0
331	No	-1	246.5	0
332	No	-1	196.5	0
333	No	-1	245.5	0
334	No	-1	212	9.5
335	No	-1	220.5	9.5
336	No	-1	212	0
337	No	-1	221.5	9.5
338	No	-1	230	9.5
339	No	-1	230	0
340	No	-1	232	0
341	No	-1	210	0
342	No	-1	200	12.5
343	No	-1	203.5	12.5
344	No	-1	203.5	0
345	No	-1	200	0
346	No	65.5	261	5
347	No	64.5	261	10
348	No	65.5	261	10
349	No	64.5	261	15
350	No	90.5	261	9.5
351	No	65.5	261	15
352	No	85	261	9.5
353	No	85	261	0
354	No	91.5	261	9.5
355	No	97	261	9.5
356	No	97	261	0
357	No	78	261	0
358	No	104	261	0
359	No	66.5	261	0

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
360	No	115.5	261	0
361	No	116.5	261	5
362	No	117.5	261	5
363	No	116.5	261	10
364	No	117.5	261	10
365	No	116.5	261	15
366	No	117.5	261	15
367	No	-1	194.5	5
368	No	-1	195.5	5
369	No	-1	194.5	10
370	No	-1	195.5	10
371	No	-1	194.5	15
372	No	-1	195.5	15
373	No	-1	246.5	5
374	No	-1	247.5	5
375	No	-1	246.5	10
376	No	-1	247.5	10
377	No	-1	246.5	15
378	No	-1	247.5	15
379	No	313	120.5	0
380	No	313	165.5	0
381	No	313	120.5	5.5
382	No	116.5	-1	5
383	No	246.5	-1	13
384	No	313	165.5	5.5
385	No	313	130	0
386	No	313	130	5.5
387	No	313	156	0
388	No	313	156	5.5
389	No	313	119.5	5
390	No	313	120.5	5
391	No	313	165.5	5
392	No	313	166.5	5
393	No	125.5	-1	9
394	No	122	-1	9
395	No	117.5	-1	9
396	No	134	-1	12.5
397	No	117.5	-1	12.5
398	No	168.5	-1	9
399	No	-1	203.5	9.5
400	No	-1	200	9.5
401	No	-1	195.5	9.5
402	No	-1	212	12.5
403	No	-1	195.5	12.5
404	No	-1	246.5	9.5

Table 1.4 - Point Bays (continued)

Label	Is Auto Point	X ft	Y ft	DZBelow ft
405	No	65.5	261	9.5
406	No	116.5	261	9.5
407	Yes	156	130	0
408	No	117.5	-1	5
409	No	116.5	-1	10
410	No	117.5	-1	10
411	No	116.5	-1	15
412	No	117.5	-1	15
413	No	168.5	-1	5
414	No	169.5	-1	5
415	No	168.5	-1	10
416	No	169.5	-1	10
417	No	168.5	-1	15
418	No	169.5	-1	15

## 1.4 Line Connectivity

Table 1.5 - Column Bays

Label	PointBayI	PointBayJ	IEndStory
C1	385	386	Below
C2	387	388	Below

Table 1.6 - Beam Bays

Label	PointBayI	PointBayJ
B1	76	77
B2	78	79
B3	80	81
B4	82	83
B5	84	85
B6	86	87
B7	88	89
B8	91	93
B9	111	112
B10	90	95
B11	92	96
B12	97	98
B13	99	100
B14	101	102
B15	103	104
B16	105	106
B17	107	108
B18	109	110
B19	113	114
B20	115	116
B21	117	118

Table 1.6 - Beam Bays (continued)

Label	PointBayI	PointBayJ
B22	119	120
B23	121	122
B24	123	124
B25	125	126
B26	127	128
B27	129	130
B28	131	132
B29	133	134
B30	135	136
B31	217	58
B32	25	22
B33	19	17
B34	16	14
B35	1	8
B36	301	302
B37	37	12
B38	6	18
B39	11	38
B40	39	41
B41	42	43
B42	70	44
B43	174	175
B44	178	180
B45	187	189
B46	220	221
B47	222	223
B48	224	225
B49	226	227
B50	228	229
B51	230	231
B52	232	233
B53	234	235
B54	236	237
B55	238	239
B56	240	241
B57	242	243
B58	259	148
B59	260	150
B60	261	152
B61	262	154
B62	263	156
B63	264	158
B64	265	160
B65	266	162
B66	267	164
B67	268	166

Table 1.6 - Beam Bays (continued)

Label	PointBayI	PointBayJ
B68	269	168
B69	270	170
B70	271	272
B71	273	274
B72	275	276
B73	277	278
B74	279	280
B75	281	282
B76	283	284
B77	285	286
B78	287	288
B79	289	290
B80	291	292
B81	293	294
B82	295	296
B83	297	298
B84	299	300
B85	68	21
B86	45	181
B87	137	183
B88	139	185
B89	141	191
B90	143	190
B91	24	28
B92	176	31
B93	40	50
B94	71	72
B95	73	74
B96	244	32
B97	3	9
B98	10	29
B99	47	197
B100	56	57
B101	94	59
B102	60	61
B103	65	64
B104	328	3
B105	303	304
B106	46	209
B107	319	320
B108	321	346
B109	347	348
B110	349	351
B111	361	362
B112	363	364
B113	365	366

**Table 1.6 - Beam Bays (continued)**

Label	PointBayI	PointBayJ
B114	209	319
B115	350	354
B116	327	330
B117	335	337
B118	367	368
B119	369	370
B120	371	372
B121	373	374
B122	375	376
B123	377	378
B124	326	327
B125	330	331
B126	389	390
B127	41	379
B128	380	42
B129	391	392
B131	302	303
B132	306	308
B133	382	408
B134	409	410
B135	411	412
B136	413	414
B137	415	416
B138	417	418
B139	379	385
B140	385	387
B141	387	380

**1.5 Area Connectivity****Table 1.7 - Floor Bays**

Label	NumPoints	PointNumber	PointBay
F1	4	1	45
F1		2	32
F1		3	21
F1		4	3

**Table 1.8 - Wall Bays**

Label	NumPoints	PointNumber	PointBay	PointStory
W1	4	1	381	Same
W1		2	386	Same
W1		3	385	Same
W1		4	379	Same
W2	4	1	386	Same
W2		2	388	Same
W2		3	387	Same



Table 1.8 - Wall Bays (continued)

Label	NumPoints	PointNumber	PointBay	PointStory
W2		4	385	Same
W3	4	1	183	Below
W3		2	137	Below
W3		3	137	Same
W3		4	183	Same
W4	4	1	388	Same
W4		2	384	Same
W4		3	380	Same
W4		4	387	Same
W6	4	1	185	Below
W6		2	139	Below
W6		3	139	Same
W6		4	185	Same
W7	4	1	12	Below
W7		2	37	Below
W7		3	37	Same
W7		4	12	Same
W9	4	1	18	Below
W9		2	6	Below
W9		3	6	Same
W9		4	18	Same
W10	4	1	8	Below
W10		2	1	Below
W10		3	1	Same
W10		4	8	Same
W11	4	1	181	Below
W11		2	45	Below
W11		3	45	Same
W11		4	181	Same
W12	4	1	38	Below
W12		2	11	Below
W12		3	11	Same
W12		4	38	Same
W13	4	1	14	Below
W13		2	16	Below
W13		3	16	Same
W13		4	14	Same
W15	4	1	191	Below
W15		2	141	Below
W15		3	141	Same
W15		4	191	Same
W16	4	1	17	Below
W16		2	19	Below
W16		3	19	Same
W16		4	17	Same
W17	4	1	41	Below

Table 1.8 - Wall Bays (continued)

Label	NumPoints	PointNumber	PointBay	PointStory
W17		2	39	Below
W17		3	39	Same
W17		4	41	Same
W19	4	1	43	Below
W19		2	42	Below
W19		3	42	Same
W19		4	43	Same
W20	4	1	22	Below
W20		2	25	Below
W20		3	25	Same
W20		4	22	Same
W21	4	1	190	Below
W21		2	143	Below
W21		3	143	Same
W21		4	190	Same
W22	4	1	44	Below
W22		2	70	Below
W22		3	70	Same
W22		4	44	Same
W23	4	1	3	Below
W23		2	328	Below
W23		3	328	Same
W23		4	3	Same
W25	4	1	10	Below
W25		2	29	Below
W25		3	29	Same
W25		4	10	Same
W27	4	1	28	Below
W27		2	24	Below
W27		3	24	Same
W27		4	28	Same
W32	4	1	323	Same
W32		2	13	Same
W32		3	40	Same
W32		4	322	Same
W33	4	1	21	Below
W33		2	68	Below
W33		3	68	Same
W33		4	21	Same
W35	4	1	31	Below
W35		2	176	Below
W35		3	176	Same
W35		4	31	Same
W38	4	1	325	Same
W38		2	323	Same
W38		3	322	Same

Table 1.8 - Wall Bays (continued)

Label	NumPoints	PointNumber	PointBay	PointStory
W38		4	324	Same
W39	4	1	72	Below
W39		2	71	Below
W39		3	71	Same
W39		4	72	Same
W40	4	1	383	Same
W40		2	325	Same
W40		3	324	Same
W40		4	50	Same
W41	4	1	74	Below
W41		2	73	Below
W41		3	73	Same
W41		4	74	Same
W42	4	1	58	Below
W42		2	63	Below
W42		3	63	Same
W42		4	58	Same
W43	4	1	32	Below
W43		2	244	Below
W43		3	244	Same
W43		4	32	Same
W44	4	1	322	Below
W44		2	40	Below
W44		3	13	Same
W44		4	323	Same
W45	4	1	50	Below
W45		2	324	Below
W45		3	325	Same
W45		4	383	Same
W46	4	1	305	Same
W46		2	306	Same
W46		3	302	Same
W46		4	307	Same
W47	4	1	393	Same
W47		2	305	Same
W47		3	307	Same
W47		4	317	Same
W48	4	1	394	Same
W48		2	393	Same
W48		3	317	Same
W48		4	318	Same
W49	4	1	395	Same
W49		2	394	Same
W49		3	318	Same
W49		4	301	Same
W50	4	1	316	Same

**Table 1.8 - Wall Bays (continued)**

Label	NumPoints	PointNumber	PointBay	PointStory
W50		2	396	Same
W50		3	305	Same
W50		4	393	Same
W51	4	1	315	Same
W51		2	316	Same
W51		3	393	Same
W51		4	394	Same
W52	4	1	56	Below
W52		2	57	Below
W52		3	57	Same
W52		4	56	Same
W53	4	1	397	Same
W53		2	315	Same
W53		3	394	Same
W53		4	395	Same
W54	4	1	317	Below
W54		2	307	Below
W54		3	396	Same
W54		4	316	Same
W55	4	1	301	Below
W55		2	318	Below
W55		3	315	Same
W55		4	397	Same
W56	4	1	60	Below
W56		2	61	Below
W56		3	61	Same
W56		4	60	Same
W57	4	1	309	Same
W57		2	398	Same
W57		3	304	Same
W57		4	310	Same
W58	4	1	308	Same
W58		2	309	Same
W58		3	310	Same
W58		4	303	Same
W59	4	1	310	Below
W59		2	304	Below
W59		3	398	Same
W59		4	309	Same
W60	4	1	65	Below
W60		2	64	Below
W60		3	64	Same
W60		4	65	Same
W61	4	1	334	Same
W61		2	335	Same
W61		3	327	Same

Table 1.8 - Wall Bays (continued)

Label	NumPoints	PointNumber	PointBay	PointStory
W61		4	336	Same
W62	4	1	399	Same
W62		2	334	Same
W62		3	336	Same
W62		4	344	Same
W63	4	1	400	Same
W63		2	399	Same
W63		3	344	Same
W63		4	345	Same
W64	4	1	401	Same
W64		2	400	Same
W64		3	345	Same
W64		4	326	Same
W65	4	1	343	Same
W65		2	402	Same
W65		3	334	Same
W65		4	399	Same
W66	4	1	342	Same
W66		2	343	Same
W66		3	399	Same
W66		4	400	Same
W67	4	1	403	Same
W67		2	342	Same
W67		3	400	Same
W67		4	401	Same
W68	4	1	344	Below
W68		2	336	Below
W68		3	402	Same
W68		4	343	Same
W69	4	1	326	Below
W69		2	345	Below
W69		3	342	Same
W69		4	403	Same
W70	4	1	338	Same
W70		2	404	Same
W70		3	331	Same
W70		4	339	Same
W71	4	1	3	Below
W71		2	9	Below
W71		3	9	Same
W71		4	3	Same
W72	4	1	94	Below
W72		2	59	Below
W72		3	59	Same
W72		4	94	Same
W73	4	1	337	Same

**Table 1.8 - Wall Bays (continued)**

Label	NumPoints	PointNumber	PointBay	PointStory
W73		2	338	Same
W73		3	339	Same
W73		4	330	Same
W74	4	1	339	Below
W74		2	331	Below
W74		3	404	Same
W74		4	338	Same
W75	4	1	352	Same
W75		2	350	Same
W75		3	209	Same
W75		4	353	Same
W76	4	1	47	Below
W76		2	197	Below
W76		3	197	Same
W76		4	47	Same
W77	4	1	405	Same
W77		2	352	Same
W77		3	353	Same
W77		4	46	Same
W78	4	1	66	Below
W78		2	217	Below
W78		3	217	Same
W78		4	66	Same
W79	4	1	46	Below
W79		2	353	Below
W79		3	352	Same
W79		4	405	Same
W80	4	1	355	Same
W80		2	406	Same
W80		3	320	Same
W80		4	356	Same
W81	4	1	354	Same
W81		2	355	Same
W81		3	356	Same
W81		4	319	Same
W82	4	1	356	Below
W82		2	320	Below
W82		3	406	Same
W82		4	355	Same

**1.6 Mass**

**Table 1.9 - Mass Source Definition**

Name	Is Default	Include Lateral Mass?	Include Vertical Mass?	Lump Mass?	Source Self Mass?	Source Added Mass?	Source Load Patterns?	Move Mass Centroid?
MsSrc1	Yes	Yes	No	Yes	Yes	Yes	No	No

**Table 1.10 - Centers Of Mass And Rigidity**

Story	Diaphragm	Mass X lb-s2/ft	Mass Y lb-s2/ft	XCM ft	YCM ft	Cum Mass X lb-s2/ft	Cum Mass Y lb-s2/ft	XCCM ft	YCCM ft	XCR ft	YCR ft
Story1	D1	79388.62	79388.62	156	130	79388.62	79388.62	156	130		

**Table 1.11 - Mass Summary by Diaphragm**

Story	Diaphragm	Mass X lb-s2/ft	Mass Y lb-s2/ft	Mass Moment of Inertia kip-ft-s2	X Mass Center ft	Y Mass Center ft
Story1	D1	79388.62	79388.62	3319238.2022	156	130

**Table 1.12 - Mass Summary by Story**

Story	UX lb-s2/ft	UY lb-s2/ft	UZ lb-s2/ft
Story1	79388.62	79388.62	0
Base	0	0	0

**Table 1.13 - Mass Summary by Group**

Group	Self Mass lb-s2/ft	Self Weight kip	Mass X lb-s2/ft	Mass Y lb-s2/ft	Mass Z lb-s2/ft
All	0	0	79388.62	79388.62	0

**1.7 Groups**

**Table 1.14 - Group Definitions**

Name	Color	Steel Design?	Concrete Design?	Composite Design?
All	Yellow	No	No	No

## 2 Properties

This chapter provides property information for materials, frame sections, shell sections, and links.

### 2.1 Materials

**Table 2.1 - Material Properties - General**

Material	Type	SymType	Grade	Color	Notes
4000Psi	Concrete	Isotropic	Unknown	Gray8Dark	
A416Gr270	Tendon	Uniaxial	Unknown	Cyan	
A615Gr60	Rebar	Uniaxial	Unknown	Blue	
A706Gr60	Rebar	Uniaxial	Grade 60	Blue	
A992Fy50	Steel	Isotropic	Unknown	Yellow	
C3.5X50	Concrete	Isotropic	Unknown	Blue	
C3.5X70	Concrete	Isotropic	Unknown	Blue	
C4X50	Concrete	Isotropic	Unknown	Blue	
C5X50	Concrete	Isotropic	Unknown	Blue	
Deck ASTM C955 Grade 33	Steel	Isotropic	Grade 50	Blue	
GL1	Steel	Isotropic	Grade 50	Blue	
GL13	Steel	Isotropic	Grade 50	Blue	
GLA/L	Steel	Isotropic	Grade 50	Blue	
Steel <sub>NM</sub>	Steel	Isotropic	Grade 50	Blue	

### 2.2 Frame Sections

**Table 2.2 - Frame Section Property Definitions - Summary (Part 1 of 3)**

Name	Material	Shape	Color	Area in2	J in4	I33 in4	I22 in4	As2 in2	As3 in2	S33Pos in3
B12X16C5	C5X50	Concrete Rectangular	Yellow	192	4976.26	4096	2304	160	160	512
B12X26C5	C5X50	Concrete Rectangular	Gray8Dark	312	10637.91	17576	3744	260	260	1352
B12X28C4	C5X50	Concrete Rectangular	Magenta	336	11785.68	21952	4032	280	280	1568
B12X28C5	C5X50	Concrete Rectangular	Cyan	336	11785.68	21952	4032	280	280	1568
B12X36C4	C4X50	Concrete Rectangular	Magenta	432	16385.92	46656	5184	360	360	2592
B12X38C5	C5X50	Concrete Rectangular	Yellow	456	17537.05	54872	5472	380	380	2888
Col12X16	C5X50	Concrete Rectangular	Magenta	192	4976.26	4096	2304	160	160	512
Col12X30	C5X50	Concrete Rectangular	Yellow	360	12934.73	27000	4320	300	300	1800
ConcBm	C4X50	Concrete Rectangular	Blue	432	25192.3	20736	11664	360	360	1728
ConcCol	C4X50	Concrete Rectangular	Gray8Dark	324	14784.12	8748	8748	270	270	972
CP18	A992Fy50	Concrete Rectangular	Cyan	9	0.74	243	0.19	7.5	7.5	27
CP2	A992Fy50	Concrete Rectangular	Green	9	0.74	243	0.19	7.5	7.5	27
GL1	Steel <sub>NM</sub>	Concrete Rectangular	Gray8Dark	0	2920.32	0	0	0	0	0
GL13	Steel <sub>NM</sub>	Concrete Rectangular	Blue	0	2920.32	0	0	0	0	0
GLA	Steel <sub>NM</sub>	Concrete Rectangular	Green	0	2920.32	0	0	0	0	0
GLL	Steel <sub>NM</sub>	Concrete Rectangular	Cyan	0	2920.32	0	0	0	0	0
SteelBm	A992Fy50	Steel I/Wide Flange	Yellow	10.25	0.59	561.85	18.02	4.49	5.58	62.43
SteelCol	A992Fy50	Steel I/Wide Flange	Magenta	44	12.71	2774.67	972.17	9.04	32.04	308.3
W10X12	A992Fy50	Steel I/Wide Flange	Yellow	3.54	0.05	53.8	2.18	1.88	1.39	10.9
W10X30	A992Fy50	Steel I/Wide Flange	Gray8Dark	8.84	0.62	170	16.7	3.15	4.94	32.38
W8X40	A992Fy50	Steel I/Wide Flange	Blue	11.7	1.12	146	49.1	2.97	7.53	35.39





**Table 2.2 - Frame Section Property Definitions - Summary (Part 3 of 3, continued)**

As2 Modifier	As3 Modifier	J Modifier	I33 Modifier	I22 Modifier	Mass Modifier	Weight Modifier
1	1	1	1	1	1	1
1	1	1	1	1	1	1

**2.3 Shell Sections**

**Table 2.3 - Area Section Property Definitions - Summary**

Name	Type	Element Type	Material	Total Thickness in	Deck Material	Deck Depth in
CDIAPH4X50 <sub>8in</sub>	Slab	Shell-Thin	C5X50	8		
Deck1	Deck	Membrane	Not Applicable	1.5	A992Fy50	1.5
Roof 20 gage	Slab	Membrane	Steel <sub>NM</sub>	0.033		
W10C5X50	Wall	Membrane	C5X50	10		
W12C4X50	Wall	Membrane	C4X50	12		
W12C5X50	Wall	Membrane	C5X50	12		
W7.25C3.5X50	Wall	Shell-Thin	C3.5X50	7.25		
W7.25C3.5X70	Wall	Membrane	C3.5X70	7.25		

**2.4 Reinforcement Sizes**

**Table 2.4 - Reinforcing Bar Sizes**

Name	Diameter in	Area in <sup>2</sup>
#2	0.25	0.05
#3	0.375	0.11
#4	0.5	0.2
#5	0.625	0.31
#6	0.75	0.44
#7	0.875	0.6
#8	1	0.79
#9	1.128	1
#10	1.27	1.27
#11	1.41	1.56
#14	1.693	2.25
#18	2.257	4

**2.5 Links**

**Table 2.5 - Link Property Definitions - Summary**

Name	Type	Degrees of Freedom	Mass lb-s <sup>2</sup> /ft	Weight kip	Defined Length ft	Defined Area ft <sup>2</sup>
Link1	Linear	U1	0	0	0.0833	0.01

## 2.6 Spring Properties

**Table 2.6 - Spring Property Definitions - Point Springs**

Name	Stiffness Option	Stiffness UX kip/in	Stiffness UY kip/in	Stiffness UZ kip/in	Stiffness RX kip-in/rad	Stiffness RY kip-in/rad	Stiffness RZ kip-in/rad	Color	Notes
500k/in	User	10000	10000	500	0	0	0	Blue	

## 2.7 Tendon Sections

**Table 2.7 - Tendon Section Properties**

Name	Material	StrandArea in2	Color	Notes
Tendon1	A416Gr270	0.15	Green	

### 3 Assignments

This chapter provides a listing of the assignments applied to the model.

#### 3.1 Joint Assignments

**Table 3.1 - Joint Assignments - Summary**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	3	140	D1		
Story1	21	138	D1		
Story1	32	68	D1		
Story1	45	94	D1		
Story1	9	16	D1		
Story1	10	18	D1		
Story1	29	20	D1		
Story1	47	22	D1		
Story1	56	26	D1		
Story1	57	28	D1		
Story1	59	34	D1		
Story1	60	36	D1		
Story1	61	38	D1		
Story1	64	112	D1		
Story1	65	116	D1		
Story1	68	82	From Area		
Story1	70	78	From Area		
Story1	76	141	Disconnected		
Story1	77	142	Disconnected		
Story1	78	143	Disconnected		
Story1	79	144	Disconnected		
Story1	80	145	Disconnected		
Story1	81	146	Disconnected		
Story1	84	149	Disconnected		
Story1	85	150	Disconnected		
Story1	86	151	Disconnected		
Story1	87	152	Disconnected		
Story1	88	153	Disconnected		
Story1	89	154	Disconnected		
Story1	90	161	Disconnected		
Story1	92	163	Disconnected		
Story1	94	160	D1		
Story1	95	162	Disconnected		
Story1	96	164	Disconnected		
Story1	97	165	Disconnected		
Story1	98	166	Disconnected		
Story1	99	167	Disconnected		
Story1	100	168	Disconnected		
Story1	101	169	Disconnected		
Story1	102	170	Disconnected		
Story1	103	171	Disconnected		
Story1	104	172	Disconnected		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	105	173	Disconnected		
Story1	106	174	Disconnected		
Story1	107	175	Disconnected		
Story1	108	176	Disconnected		
Story1	109	177	Disconnected		
Story1	110	178	Disconnected		
Story1	1	2	D1		
Story1	8	42	D1		
Story1	14	50	D1		
Story1	16	54	D1		
Story1	17	62	D1		
Story1	19	100	D1		
Story1	22	106	D1		
Story1	25	148	D1		
Story1	58	156	D1		
Story1	63	180	D1		
Story1	66	182	D1		
Story1	82	364	From Area		
Story1	83	365	From Area		
Story1	91	366	From Area		
Story1	93	367	From Area		
Story1	111	368	From Area		
Story1	112	369	From Area		
Story1	113	370	From Area		
Story1	114	371	From Area		
Story1	115	372	From Area		
Story1	116	373	From Area		
Story1	117	374	From Area		
Story1	118	375	From Area		
Story1	119	376	From Area		
Story1	120	377	From Area		
Story1	121	378	From Area		
Story1	122	379	From Area		
Story1	123	380	From Area		
Story1	124	381	From Area		
Story1	125	384	From Area		
Story1	126	385	From Area		
Story1	127	386	From Area		
Story1	128	387	From Area		
Story1	129	388	From Area		
Story1	130	389	From Area		
Story1	131	390	From Area		
Story1	132	391	From Area		
Story1	133	392	From Area		
Story1	134	393	From Area		
Story1	135	394	From Area		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	136	395	From Area		
Story1	137	6	From Area		
Story1	139	9	From Area		
Story1	141	213	From Area		
Story1	143	216	From Area		
Story1	148	274	From Area		
Story1	150	277	From Area		
Story1	152	280	From Area		
Story1	154	282	From Area		
Story1	156	319	From Area		
Story1	158	321	From Area		
Story1	160	323	From Area		
Story1	162	325	From Area		
Story1	164	327	From Area		
Story1	166	329	From Area		
Story1	168	331	From Area		
Story1	170	333	From Area		
Story1	176	234	From Area		
Story1	181	58	From Area		
Story1	183	7	From Area		
Story1	185	23	From Area		
Story1	190	217	From Area		
Story1	191	214	From Area		
Story1	197	291	D1		
Story1	217	315	D1		
Story1	6	43	From Area		
Story1	11	48	From Area		
Story1	12	39	From Area		
Story1	18	44	From Area		
Story1	37	32	From Area		
Story1	38	46	From Area		
Story1	39	52	From Area		
Story1	41	60	From Area		
Story1	42	64	From Area		
Story1	43	66	From Area		
Story1	44	80	From Area		
Story1	174	105	From Area		
Story1	175	107	From Area		
Story1	178	108	From Area		
Story1	180	109	From Area		
Story1	187	110	From Area		
Story1	189	113	From Area		
Story1	220	114	From Area		
Story1	221	117	From Area		
Story1	222	118	From Area		
Story1	223	119	From Area		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	224	120	From Area		
Story1	225	121	From Area		
Story1	226	122	From Area		
Story1	227	123	From Area		
Story1	228	124	From Area		
Story1	229	125	From Area		
Story1	230	126	From Area		
Story1	231	127	From Area		
Story1	232	128	From Area		
Story1	233	129	From Area		
Story1	234	130	From Area		
Story1	235	131	From Area		
Story1	236	132	From Area		
Story1	237	133	From Area		
Story1	238	134	From Area		
Story1	239	135	From Area		
Story1	240	136	From Area		
Story1	241	157	From Area		
Story1	242	158	From Area		
Story1	243	231	From Area		
Story1	24	219	From Area		
Story1	28	229	From Area		
Story1	31	236	From Area		
Story1	40	238	From Area		
Story1	50	240	From Area		
Story1	71	242	From Area		
Story1	72	244	From Area		
Story1	73	246	From Area		
Story1	74	248	From Area		
Story1	244	250	From Area		
Story1	259	273	From Area		
Story1	260	275	From Area		
Story1	261	279	From Area		
Story1	262	281	From Area		
Story1	263	318	From Area		
Story1	264	320	From Area		
Story1	265	322	From Area		
Story1	266	324	From Area		
Story1	267	326	From Area		
Story1	268	328	From Area		
Story1	269	330	From Area		
Story1	270	332	From Area		
Story1	271	334	From Area		
Story1	272	335	From Area		
Story1	273	336	From Area		
Story1	274	337	From Area		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	275	338	From Area		
Story1	276	339	From Area		
Story1	277	340	From Area		
Story1	278	341	From Area		
Story1	279	342	From Area		
Story1	280	343	From Area		
Story1	281	344	From Area		
Story1	282	345	From Area		
Story1	283	346	From Area		
Story1	284	347	From Area		
Story1	285	348	From Area		
Story1	286	349	From Area		
Story1	287	350	From Area		
Story1	288	351	From Area		
Story1	289	352	From Area		
Story1	290	353	From Area		
Story1	291	354	From Area		
Story1	292	355	From Area		
Story1	293	356	From Area		
Story1	294	357	From Area		
Story1	295	358	From Area		
Story1	296	359	From Area		
Story1	297	360	From Area		
Story1	298	361	From Area		
Story1	299	362	From Area		
Story1	300	363	From Area		
Story1	301	201	From Area		
Story1	302	200	From Area		
Story1	303	205	From Area		
Story1	304	204	From Area		
Story1	305	206	From Area		
Story1	306	207	From Area		
Story1	307	472	From Area		
Story1	308	209	From Area		
Story1	309	210	From Area		
Story1	310	481	From Area		
Story1	315	224	From Area		
Story1	316	225	From Area		
Story1	317	474	From Area		
Story1	318	476	From Area		
Story1	322	460	From Area		
Story1	323	383	From Area		
Story1	324	461	From Area		
Story1	325	397	From Area		
Story1	326	401	From Area		
Story1	327	400	From Area		



**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	328	96	D1		
Story1	330	407	From Area		
Story1	331	406	From Area		
Story1	334	411	From Area		
Story1	335	412	From Area		
Story1	336	482	From Area		
Story1	337	414	From Area		
Story1	338	415	From Area		
Story1	339	491	From Area		
Story1	342	419	From Area		
Story1	343	420	From Area		
Story1	344	484	From Area		
Story1	345	486	From Area		
Story1	46	196	From Area		
Story1	209	195	From Area		
Story1	319	299	From Area		
Story1	320	232	From Area		
Story1	350	430	From Area		
Story1	352	429	From Area		
Story1	353	492	From Area		
Story1	354	432	From Area		
Story1	355	433	From Area		
Story1	356	495	From Area		
Story1	321	518	From Area		
Story1	346	519	From Area		
Story1	347	520	From Area		
Story1	348	521	From Area		
Story1	349	522	From Area		
Story1	351	523	From Area		
Story1	361	512	From Area		
Story1	362	513	From Area		
Story1	363	514	From Area		
Story1	364	515	From Area		
Story1	365	516	From Area		
Story1	366	517	From Area		
Story1	367	510	From Area		
Story1	368	511	From Area		
Story1	369	508	From Area		
Story1	370	509	From Area		
Story1	371	506	From Area		
Story1	372	507	From Area		
Story1	373	500	From Area		
Story1	374	501	From Area		
Story1	375	502	From Area		
Story1	376	503	From Area		
Story1	377	504	From Area		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Story1	378	505	From Area		
Story1	379	458	From Area		
Story1	380	457	From Area		
Story1	381	408	From Area		
Story1	384	425	From Area		
Story1	385	423	From Area		
Story1	386	464	From Area		
Story1	387	424	From Area		
Story1	388	466	From Area		
Story1	389	467	From Area		
Story1	390	468	From Area		
Story1	391	469	From Area		
Story1	392	470	From Area		
Story1	13	403	From Area		
Story1	383	471	From Area		
Story1	393	473	From Area		
Story1	394	475	From Area		
Story1	395	477	From Area		
Story1	396	478	From Area		
Story1	397	479	From Area		
Story1	398	480	From Area		
Story1	399	483	From Area		
Story1	400	485	From Area		
Story1	401	487	From Area		
Story1	402	488	From Area		
Story1	403	489	From Area		
Story1	404	490	From Area		
Story1	405	493	From Area		
Story1	406	494	From Area		
Story1	382	194	From Area		
Story1	408	197	From Area		
Story1	409	199	From Area		
Story1	410	202	From Area		
Story1	411	399	From Area		
Story1	412	404	From Area		
Story1	413	455	From Area		
Story1	414	456	From Area		
Story1	415	496	From Area		
Story1	416	497	From Area		
Story1	417	498	From Area		
Story1	418	499	From Area		
Story1	407	3	D1		
Base	3	139	Disconnected		
Base	21	137	Disconnected		
Base	32	67	Disconnected		
Base	45	93	Disconnected		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Base	9	15	Disconnected		
Base	10	17	Disconnected		
Base	29	19	Disconnected		
Base	47	21	Disconnected		
Base	56	25	Disconnected		
Base	57	27	Disconnected		
Base	59	33	Disconnected		
Base	60	35	Disconnected		
Base	61	37	Disconnected		
Base	64	111	Disconnected		
Base	65	115	Disconnected		
Base	67	104	From Area		500k/in
Base	68	81	From Area		
Base	69	98	From Area		500k/in
Base	70	77	From Area		
Base	75	91	From Area		500k/in
Base	94	159	Disconnected		
Base	4	305	Disconnected		500k/in
Base	1	1	Disconnected		
Base	8	41	Disconnected		
Base	14	49	Disconnected		
Base	15	307	Disconnected		500k/in
Base	16	53	Disconnected		
Base	17	61	Disconnected		
Base	19	99	Disconnected		
Base	22	103	Disconnected		
Base	23	311	Disconnected		500k/in
Base	25	147	Disconnected		
Base	58	155	Disconnected		
Base	63	179	Disconnected		
Base	66	181	Disconnected		
Base	137	5	From Area		
Base	138	261	From Area		500k/in
Base	139	8	From Area		
Base	140	260	From Area		500k/in
Base	141	86	From Area		
Base	142	259	From Area		500k/in
Base	143	215	From Area		
Base	144	258	From Area		500k/in
Base	172	257	From Area		500k/in
Base	176	233	From Area		
Base	177	256	From Area		500k/in
Base	179	272	Disconnected		500k/in
Base	181	57	From Area		
Base	183	276	Disconnected		
Base	185	278	Disconnected		

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Base	190	283	Disconnected		
Base	191	284	Disconnected		
Base	192	285	Disconnected		500k/in
Base	193	286	Disconnected		500k/in
Base	194	287	Disconnected		500k/in
Base	195	288	Disconnected		500k/in
Base	196	289	Disconnected		500k/in
Base	197	290	Disconnected		
Base	198	292	Disconnected		500k/in
Base	199	293	Disconnected		500k/in
Base	200	294	Disconnected		500k/in
Base	201	295	Disconnected		500k/in
Base	202	296	Disconnected		500k/in
Base	203	297	Disconnected		500k/in
Base	204	298	Disconnected		500k/in
Base	206	300	Disconnected		500k/in
Base	207	301	Disconnected		500k/in
Base	208	302	Disconnected		500k/in
Base	210	304	Disconnected		500k/in
Base	211	306	Disconnected		500k/in
Base	212	308	Disconnected		500k/in
Base	213	309	Disconnected		500k/in
Base	214	310	Disconnected		500k/in
Base	215	312	Disconnected		500k/in
Base	216	313	Disconnected		500k/in
Base	217	314	Disconnected		
Base	218	316	Disconnected		500k/in
Base	219	317	Disconnected		500k/in
Base	6	40	From Area		
Base	7	85	From Area		500k/in
Base	11	47	From Area		
Base	12	14	From Area		
Base	18	24	From Area		
Base	37	31	From Area		
Base	38	45	From Area		
Base	39	51	From Area		
Base	41	59	From Area		
Base	42	63	From Area		
Base	43	65	From Area		
Base	44	79	From Area		
Base	48	83	From Area		500k/in
Base	49	84	From Area		500k/in
Base	51	87	From Area		500k/in
Base	52	88	From Area		500k/in
Base	53	89	From Area		500k/in
Base	54	90	From Area		500k/in

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Base	55	92	From Area		500k/in
Base	62	97	From Area		500k/in
Base	146	101	From Area		500k/in
Base	147	102	From Area		500k/in
Base	2	271	From Area		500k/in
Base	24	218	From Area		
Base	28	228	From Area		
Base	31	235	From Area		
Base	40	237	From Area		
Base	50	239	From Area		
Base	71	241	From Area		
Base	72	243	From Area		
Base	73	245	From Area		
Base	74	247	From Area		
Base	244	249	From Area		
Base	245	251	From Area		500k/in
Base	246	252	From Area		500k/in
Base	247	253	From Area		500k/in
Base	248	254	From Area		500k/in
Base	249	255	From Area		500k/in
Base	250	262	From Area		500k/in
Base	251	263	From Area		500k/in
Base	252	264	From Area		500k/in
Base	253	265	From Area		500k/in
Base	254	266	From Area		500k/in
Base	255	267	From Area		500k/in
Base	256	268	From Area		500k/in
Base	257	269	From Area		500k/in
Base	258	270	From Area		500k/in
Base	5	4	Disconnected		500k/in
Base	20	10	Disconnected		500k/in
Base	26	11	Disconnected		500k/in
Base	27	12	Disconnected		500k/in
Base	30	13	Disconnected		500k/in
Base	33	29	Disconnected		500k/in
Base	34	30	Disconnected		500k/in
Base	35	55	Disconnected		500k/in
Base	36	56	Disconnected		500k/in
Base	145	69	Disconnected		500k/in
Base	149	70	Disconnected		500k/in
Base	151	71	Disconnected		500k/in
Base	153	72	Disconnected		500k/in
Base	155	73	Disconnected		500k/in
Base	157	74	Disconnected		500k/in
Base	159	75	Disconnected		500k/in
Base	161	76	Disconnected		500k/in

**Table 3.1 - Joint Assignments - Summary (continued)**

Story	Label	UniqueName	Diaphragm	Restraints	Spring
Base	163	183	Disconnected		500k/in
Base	165	184	Disconnected		500k/in
Base	167	185	Disconnected		500k/in
Base	169	186	Disconnected		500k/in
Base	171	187	Disconnected		500k/in
Base	173	188	Disconnected		500k/in
Base	182	189	Disconnected		500k/in
Base	184	190	Disconnected		500k/in
Base	186	191	Disconnected		500k/in
Base	188	192	Disconnected		500k/in
Base	205	193	Disconnected		500k/in
Base	301	198	From Area		
Base	304	203	From Area		
Base	307	208	From Area		
Base	310	211	From Area		
Base	311	220	Disconnected	UX; UY; UZ	500k/in
Base	312	221	Disconnected	UX; UY; UZ	500k/in
Base	313	222	Disconnected		500k/in
Base	314	223	Disconnected		500k/in
Base	317	226	From Area		
Base	318	227	From Area		
Base	322	382	From Area		
Base	324	396	From Area		
Base	326	398	From Area		
Base	328	402	From Area		
Base	329	303	Disconnected		500k/in
Base	331	405	From Area		
Base	332	409	Disconnected		500k/in
Base	333	410	Disconnected		500k/in
Base	336	413	From Area		
Base	339	416	From Area		
Base	340	417	Disconnected		500k/in
Base	341	418	Disconnected		500k/in
Base	344	421	From Area		
Base	345	422	From Area		
Base	46	95	From Area		
Base	320	230	From Area		
Base	353	431	From Area		
Base	356	434	From Area		
Base	357	435	Disconnected		500k/in
Base	358	436	Disconnected		500k/in
Base	359	437	Disconnected		500k/in
Base	360	438	Disconnected		500k/in
Base	385	463	From Area	UX; UY; UZ	
Base	387	465	From Area	UX; UY; UZ	

**Table 3.2 - Joint Assignments - Springs**

Story	Label	UniqueName	SpringProp
Base	67	104	500k/in
Base	69	98	500k/in
Base	75	91	500k/in
Base	4	305	500k/in
Base	15	307	500k/in
Base	23	311	500k/in
Base	138	261	500k/in
Base	140	260	500k/in
Base	142	259	500k/in
Base	144	258	500k/in
Base	172	257	500k/in
Base	177	256	500k/in
Base	179	272	500k/in
Base	192	285	500k/in
Base	193	286	500k/in
Base	194	287	500k/in
Base	195	288	500k/in
Base	196	289	500k/in
Base	198	292	500k/in
Base	199	293	500k/in
Base	200	294	500k/in
Base	201	295	500k/in
Base	202	296	500k/in
Base	203	297	500k/in
Base	204	298	500k/in
Base	206	300	500k/in
Base	207	301	500k/in
Base	208	302	500k/in
Base	210	304	500k/in
Base	211	306	500k/in
Base	212	308	500k/in
Base	213	309	500k/in
Base	214	310	500k/in
Base	215	312	500k/in
Base	216	313	500k/in
Base	218	316	500k/in
Base	219	317	500k/in
Base	7	85	500k/in
Base	48	83	500k/in
Base	49	84	500k/in
Base	51	87	500k/in
Base	52	88	500k/in
Base	53	89	500k/in
Base	54	90	500k/in
Base	55	92	500k/in
Base	62	97	500k/in

**Table 3.2 - Joint Assignments - Springs (continued)**

Story	Label	UniqueName	SpringProp
Base	146	101	500k/in
Base	147	102	500k/in
Base	2	271	500k/in
Base	245	251	500k/in
Base	246	252	500k/in
Base	247	253	500k/in
Base	248	254	500k/in
Base	249	255	500k/in
Base	250	262	500k/in
Base	251	263	500k/in
Base	252	264	500k/in
Base	253	265	500k/in
Base	254	266	500k/in
Base	255	267	500k/in
Base	256	268	500k/in
Base	257	269	500k/in
Base	258	270	500k/in
Base	5	4	500k/in
Base	20	10	500k/in
Base	26	11	500k/in
Base	27	12	500k/in
Base	30	13	500k/in
Base	33	29	500k/in
Base	34	30	500k/in
Base	35	55	500k/in
Base	36	56	500k/in
Base	145	69	500k/in
Base	149	70	500k/in
Base	151	71	500k/in
Base	153	72	500k/in
Base	155	73	500k/in
Base	157	74	500k/in
Base	159	75	500k/in
Base	161	76	500k/in
Base	163	183	500k/in
Base	165	184	500k/in
Base	167	185	500k/in
Base	169	186	500k/in
Base	171	187	500k/in
Base	173	188	500k/in
Base	182	189	500k/in
Base	184	190	500k/in
Base	186	191	500k/in
Base	188	192	500k/in
Base	205	193	500k/in



**Table 3.2 - Joint Assignments - Springs (continued)**

Story	Label	UniqueName	SpringProp
Base	311	220	500k/in
Base	312	221	500k/in
Base	313	222	500k/in
Base	314	223	500k/in
Base	329	303	500k/in
Base	332	409	500k/in
Base	333	410	500k/in
Base	340	417	500k/in
Base	341	418	500k/in
Base	357	435	500k/in
Base	358	436	500k/in
Base	359	437	500k/in
Base	360	438	500k/in

**3.2 Frame Assignments**

**Table 3.3 - Frame Assignments - Summary**

Story	Label	UniqueName	Design Type	Length ft	Analysis Section	Design Section	Max Station Spacing ft	Min Number Stations	Releases
Story1	B1	1	Beam	1	CP18	CP18	2		Yes
Story1	B2	2	Beam	1	CP18	CP18	2		Yes
Story1	B3	3	Beam	1	CP18	CP18	2		Yes
Story1	B5	5	Beam	1	CP18	CP18	2		Yes
Story1	B6	6	Beam	1	CP18	CP18	2		Yes
Story1	B7	7	Beam	1	CP18	CP18	2		Yes
Story1	B10	10	Beam	1	CP18	CP18	2		Yes
Story1	B11	11	Beam	1	CP18	CP18	2		Yes
Story1	B12	12	Beam	1	CP18	CP18	2		Yes
Story1	B13	13	Beam	1	CP18	CP18	2		Yes
Story1	B14	14	Beam	1	CP18	CP18	2		Yes
Story1	B15	15	Beam	1	CP18	CP18	2		Yes
Story1	B16	16	Beam	1	CP18	CP18	2		Yes
Story1	B17	17	Beam	1	CP18	CP18	2		Yes
Story1	B18	18	Beam	1	CP18	CP18	2		Yes
Story1	B4	73	Beam	1	CP18	CP18	2		Yes
Story1	B8	74	Beam	1	CP18	CP18	2		Yes
Story1	B9	75	Beam	1	CP18	CP18	2		Yes
Story1	B19	76	Beam	1	CP18	CP18	2		Yes
Story1	B20	77	Beam	1	CP18	CP18	2		Yes
Story1	B21	78	Beam	1	CP18	CP18	2		Yes
Story1	B22	79	Beam	1	CP18	CP18	2		Yes
Story1	B23	80	Beam	1	CP18	CP18	2		Yes
Story1	B24	81	Beam	1	CP18	CP18	2		Yes
Story1	B25	83	Beam	1	CP18	CP18	2		Yes
Story1	B26	84	Beam	1	CP18	CP18	2		Yes

**Table 3.3 - Frame Assignments - Summary (continued)**

Story	Label	UniqueName	Design Type	Length ft	Analysis Section	Design Section	Max Station Spacing ft	Min Number Stations	Releases
Story1	B27	85	Beam	1	CP18	CP18	2		Yes
Story1	B28	86	Beam	1	CP18	CP18	2		Yes
Story1	B29	87	Beam	1	CP18	CP18	2		Yes
Story1	B30	88	Beam	1	CP18	CP18	2		Yes
Story1	B43	43	Beam	1	CP18	CP18	2		Yes
Story1	B44	44	Beam	1	CP18	CP18	2		Yes
Story1	B45	45	Beam	1	CP18	CP18	2		Yes
Story1	B46	46	Beam	1	CP18	CP18	2		Yes
Story1	B47	47	Beam	1	CP18	CP18	2		Yes
Story1	B48	48	Beam	1	CP18	CP18	2		Yes
Story1	B49	49	Beam	1	CP18	CP18	2		Yes
Story1	B50	50	Beam	1	CP18	CP18	2		Yes
Story1	B51	51	Beam	1	CP18	CP18	2		Yes
Story1	B52	52	Beam	1	CP18	CP18	2		Yes
Story1	B53	53	Beam	1	CP18	CP18	2		Yes
Story1	B54	54	Beam	1	CP18	CP18	2		Yes
Story1	B55	55	Beam	1	CP18	CP18	2		Yes
Story1	B56	56	Beam	1	CP18	CP18	2		Yes
Story1	B57	57	Beam	1	CP18	CP18	2		Yes
Story1	B58	31	Beam	1	CP18	CP18	2		Yes
Story1	B59	32	Beam	1	CP18	CP18	2		Yes
Story1	B60	33	Beam	1	CP18	CP18	2		Yes
Story1	B61	34	Beam	1	CP18	CP18	2		Yes
Story1	B62	35	Beam	1	CP18	CP18	2		Yes
Story1	B63	36	Beam	1	CP18	CP18	2		Yes
Story1	B64	37	Beam	1	CP18	CP18	2		Yes
Story1	B65	38	Beam	1	CP18	CP18	2		Yes
Story1	B66	39	Beam	1	CP18	CP18	2		Yes
Story1	B67	40	Beam	1	CP18	CP18	2		Yes
Story1	B68	41	Beam	1	CP18	CP18	2		Yes
Story1	B69	42	Beam	1	CP18	CP18	2		Yes
Story1	B70	58	Beam	1	CP18	CP18	2		Yes
Story1	B71	59	Beam	1	CP18	CP18	2		Yes
Story1	B72	60	Beam	1	CP18	CP18	2		Yes
Story1	B73	61	Beam	1	CP18	CP18	2		Yes
Story1	B74	62	Beam	1	CP18	CP18	2		Yes
Story1	B75	63	Beam	1	CP18	CP18	2		Yes
Story1	B76	64	Beam	1	CP18	CP18	2		Yes
Story1	B77	65	Beam	1	CP18	CP18	2		Yes
Story1	B78	66	Beam	1	CP18	CP18	2		Yes
Story1	B79	67	Beam	1	CP18	CP18	2		Yes
Story1	B80	68	Beam	1	CP18	CP18	2		Yes
Story1	B81	69	Beam	1	CP18	CP18	2		Yes
Story1	B82	70	Beam	1	CP18	CP18	2		Yes

**Table 3.3 - Frame Assignments - Summary (continued)**

Story	Label	UniqueName	Design Type	Length ft	Analysis Section	Design Section	Max Station Spacing ft	Min Number Stations	Releases
Story1	B83	71	Beam	1	CP18	CP18	2		Yes
Story1	B84	72	Beam	1	CP18	CP18	2		Yes
Story1	B31	4	Beam	35	GL13	GL13	2		Yes
Story1	B32	8	Beam	25	GL13	GL13	2		Yes
Story1	B33	9	Beam	25	GL13	GL13	2		Yes
Story1	B34	19	Beam	25	GL13	GL13	2		Yes
Story1	B35	20	Beam	25	GL13	GL13	2		Yes
Story1	B37	22	Beam	24	GL1	GL1	2		Yes
Story1	B38	23	Beam	26	GL1	GL1	2		Yes
Story1	B39	24	Beam	25	GL1	GL1	2		Yes
Story1	B40	25	Beam	28	GL1	GL1	2		Yes
Story1	B41	26	Beam	28	GL1	GL1	2		Yes
Story1	B42	27	Beam	25	GL1	GL1	2		Yes
Story1	B85	28	Beam	39.5	GL1	GL1	2		Yes
Story1	B86	29	Beam	13.5	GLA	GLA	2		Yes
Story1	B87	30	Beam	25	GLA	GLA	2		Yes
Story1	B88	82	Beam	25	GLA	GLA	2		Yes
Story1	B89	89	Beam	25	GLA	GLA	2		Yes
Story1	B90	90	Beam	25	GLA	GLA	2		Yes
Story1	B91	91	Beam	25	GLA	GLA	2		Yes
Story1	B92	92	Beam	25	GLA	GLA	2		Yes
Story1	B93	93	Beam	25	GLA	GLA	2		Yes
Story1	B94	94	Beam	25	GLA	GLA	2		Yes
Story1	B95	95	Beam	25	GLA	GLA	2		Yes
Story1	B96	96	Beam	13.5	GLA	GLA	2		Yes
Story1	B97	97	Beam	13.5	GLL	GLL	2		Yes
Story1	B98	98	Beam	25	GLL	GLL	2		Yes
Story1	B99	99	Beam	25	GLL	GLL	2		Yes
Story1	B100	100	Beam	25	GLL	GLL	2		Yes
Story1	B101	101	Beam	25	GLL	GLL	2		Yes
Story1	B102	102	Beam	25	GLL	GLL	2		Yes
Story1	B103	103	Beam	25	GLL	GLL	2		Yes
Story1	B104	21	Beam	13.5	GL13	GL13	2		Yes
Story1	B36	104	Beam	25	GLA	GLA	2		Yes
Story1	B105	105	Beam	25	GLA	GLA	2		Yes
Story1	B106	106	Beam	25	GLL	GLL	2		Yes
Story1	B107	107	Beam	25	GLL	GLL	2		Yes
Story1	B108	150	Beam	1	CP2	CP2	2		Yes
Story1	B109	151	Beam	1	CP2	CP2	2		Yes
Story1	B110	152	Beam	1	CP2	CP2	2		Yes
Story1	B111	147	Beam	1	CP2	CP2	2		Yes
Story1	B112	148	Beam	1	CP2	CP2	2		Yes
Story1	B113	149	Beam	1	CP2	CP2	2		Yes
Story1	B114	114	Beam	1	CP2	CP2	2		

**Table 3.3 - Frame Assignments - Summary (continued)**

Story	Label	UniqueName	Design Type	Length ft	Analysis Section	Design Section	Max Station Spacing ft	Min Number Stations	Releases
Story1	B115	115	Beam	1	CP2	CP2	2		
Story1	B116	116	Beam	1	CP2	CP2	2		
Story1	B117	117	Beam	1	CP2	CP2	2		
Story1	B118	146	Beam	1	CP2	CP2	2		Yes
Story1	B119	145	Beam	1	CP2	CP2	2		Yes
Story1	B120	144	Beam	1	CP2	CP2	2		Yes
Story1	B121	141	Beam	1	CP2	CP2	2		Yes
Story1	B122	142	Beam	1	CP2	CP2	2		Yes
Story1	B123	143	Beam	1	CP2	CP2	2		Yes
Story1	B124	124	Beam	25	GL13	GL13	2		Yes
Story1	B125	125	Beam	25	GL13	GL13	2		Yes
Story1	B126	128	Beam	1	CP2	CP2	2		Yes
Story1	B127	129	Beam	1	CP2	CP2	2		Yes
Story1	B128	130	Beam	1	CP2	CP2	2		Yes
Story1	B129	131	Beam	1	CP2	CP2	2		Yes
Story1	B131	133	Beam	1	CP2	CP2	2		
Story1	B132	134	Beam	1	CP2	CP2	2		
Story1	B133	135	Beam	1	CP2	CP2	2		Yes
Story1	B134	136	Beam	1	CP2	CP2	2		Yes
Story1	B135	137	Beam	1	CP2	CP2	2		Yes
Story1	B136	138	Beam	1	CP2	CP2	2		Yes
Story1	B137	139	Beam	1	CP2	CP2	2		Yes
Story1	B138	140	Beam	1	CP2	CP2	2		Yes
Story1	B139	108	Beam	9.5	GL1	GL1	2		
Story1	B140	109	Beam	26	GL1	GL1	2		
Story1	B141	110	Beam	9.5	GL1	GL1	2		
Story1	C1	126	Column	14.5	SteelCol	SteelCol		3	Yes
Story1	C2	127	Column	14.5	SteelCol	SteelCol		3	Yes

**Table 3.4 - Frame Assignments - Releases and Partial Fixity (Part 1 of 2)**

Story	Label	UniqueName	PI	PJ	V2I	V2J	V3I	V3J	TI	TJ	M2I
Story1	B1	1	No	No	No	No	No	No	Yes	No	Yes
Story1	B2	2	No	No	No	No	No	No	Yes	No	Yes
Story1	B3	3	No	No	No	No	No	No	Yes	No	Yes
Story1	B5	5	No	No	No	No	No	No	Yes	No	Yes
Story1	B6	6	No	No	No	No	No	No	Yes	No	Yes
Story1	B7	7	No	No	No	No	No	No	Yes	No	Yes
Story1	B10	10	No	No	No	No	No	No	Yes	No	Yes
Story1	B11	11	No	No	No	No	No	No	Yes	No	Yes
Story1	B12	12	No	No	No	No	No	No	Yes	No	Yes
Story1	B13	13	No	No	No	No	No	No	Yes	No	Yes
Story1	B14	14	No	No	No	No	No	No	Yes	No	Yes
Story1	B15	15	No	No	No	No	No	No	Yes	No	Yes

**Table 3.4 - Frame Assignments - Releases and Partial Fixity (Part 1 of 2, continued)**

Story	Label	UniqueName	PI	PJ	V2I	V2J	V3I	V3J	TI	TJ	M2I
Story1	B16	16	No	No	No	No	No	No	Yes	No	Yes
Story1	B17	17	No	No	No	No	No	No	Yes	No	Yes
Story1	B18	18	No	No	No	No	No	No	Yes	No	Yes
Story1	B4	73	No	No	No	No	No	No	Yes	No	Yes
Story1	B8	74	No	No	No	No	No	No	Yes	No	Yes
Story1	B9	75	No	No	No	No	No	No	Yes	No	Yes
Story1	B19	76	No	No	No	No	No	No	Yes	No	Yes
Story1	B20	77	No	No	No	No	No	No	Yes	No	Yes
Story1	B21	78	No	No	No	No	No	No	Yes	No	Yes
Story1	B22	79	No	No	No	No	No	No	Yes	No	Yes
Story1	B23	80	No	No	No	No	No	No	Yes	No	Yes
Story1	B24	81	No	No	No	No	No	No	Yes	No	Yes
Story1	B25	83	No	No	No	No	No	No	Yes	No	Yes
Story1	B26	84	No	No	No	No	No	No	Yes	No	Yes
Story1	B27	85	No	No	No	No	No	No	Yes	No	Yes
Story1	B28	86	No	No	No	No	No	No	Yes	No	Yes
Story1	B29	87	No	No	No	No	No	No	Yes	No	Yes
Story1	B30	88	No	No	No	No	No	No	Yes	No	Yes
Story1	B43	43	No	No	No	No	No	No	Yes	No	Yes
Story1	B44	44	No	No	No	No	No	No	Yes	No	Yes
Story1	B45	45	No	No	No	No	No	No	Yes	No	Yes
Story1	B46	46	No	No	No	No	No	No	Yes	No	Yes
Story1	B47	47	No	No	No	No	No	No	Yes	No	Yes
Story1	B48	48	No	No	No	No	No	No	Yes	No	Yes
Story1	B49	49	No	No	No	No	No	No	Yes	No	Yes
Story1	B50	50	No	No	No	No	No	No	Yes	No	Yes
Story1	B51	51	No	No	No	No	No	No	Yes	No	Yes
Story1	B52	52	No	No	No	No	No	No	Yes	No	Yes
Story1	B53	53	No	No	No	No	No	No	Yes	No	Yes
Story1	B54	54	No	No	No	No	No	No	Yes	No	Yes
Story1	B55	55	No	No	No	No	No	No	Yes	No	Yes
Story1	B56	56	No	No	No	No	No	No	Yes	No	Yes
Story1	B57	57	No	No	No	No	No	No	Yes	No	Yes
Story1	B58	31	No	No	No	No	No	No	Yes	No	Yes
Story1	B59	32	No	No	No	No	No	No	Yes	No	Yes
Story1	B60	33	No	No	No	No	No	No	Yes	No	Yes
Story1	B61	34	No	No	No	No	No	No	Yes	No	Yes
Story1	B62	35	No	No	No	No	No	No	Yes	No	Yes
Story1	B63	36	No	No	No	No	No	No	Yes	No	Yes
Story1	B64	37	No	No	No	No	No	No	Yes	No	Yes
Story1	B65	38	No	No	No	No	No	No	Yes	No	Yes
Story1	B66	39	No	No	No	No	No	No	Yes	No	Yes
Story1	B67	40	No	No	No	No	No	No	Yes	No	Yes
Story1	B68	41	No	No	No	No	No	No	Yes	No	Yes
Story1	B69	42	No	No	No	No	No	No	Yes	No	Yes
Story1	B70	58	No	No	No	No	No	No	Yes	No	Yes

**Table 3.4 - Frame Assignments - Releases and Partial Fixity (Part 1 of 2, continued)**

Story	Label	UniqueName	PI	PJ	V2I	V2J	V3I	V3J	TI	TJ	M2I
Story1	B71	59	No	No	No	No	No	No	Yes	No	Yes
Story1	B72	60	No	No	No	No	No	No	Yes	No	Yes
Story1	B73	61	No	No	No	No	No	No	Yes	No	Yes
Story1	B74	62	No	No	No	No	No	No	Yes	No	Yes
Story1	B75	63	No	No	No	No	No	No	Yes	No	Yes
Story1	B76	64	No	No	No	No	No	No	Yes	No	Yes
Story1	B77	65	No	No	No	No	No	No	Yes	No	Yes
Story1	B78	66	No	No	No	No	No	No	Yes	No	Yes
Story1	B79	67	No	No	No	No	No	No	Yes	No	Yes
Story1	B80	68	No	No	No	No	No	No	Yes	No	Yes
Story1	B81	69	No	No	No	No	No	No	Yes	No	Yes
Story1	B82	70	No	No	No	No	No	No	Yes	No	Yes
Story1	B83	71	No	No	No	No	No	No	Yes	No	Yes
Story1	B84	72	No	No	No	No	No	No	Yes	No	Yes
Story1	B31	4	No	No	No	No	No	No	Yes	No	Yes
Story1	B32	8	No	No	No	No	No	No	Yes	No	Yes
Story1	B33	9	No	No	No	No	No	No	Yes	No	Yes
Story1	B34	19	No	No	No	No	No	No	Yes	No	Yes
Story1	B35	20	No	No	No	No	No	No	Yes	No	Yes
Story1	B37	22	No	No	No	No	No	No	Yes	No	Yes
Story1	B38	23	No	No	No	No	No	No	Yes	No	Yes
Story1	B39	24	No	No	No	No	No	No	Yes	No	Yes
Story1	B40	25	No	No	No	No	No	No	Yes	No	Yes
Story1	B41	26	No	No	No	No	No	No	Yes	No	Yes
Story1	B42	27	No	No	No	No	No	No	Yes	No	Yes
Story1	B85	28	No	No	No	No	No	No	Yes	No	Yes
Story1	B86	29	No	No	No	No	No	No	Yes	No	Yes
Story1	B87	30	No	No	No	No	No	No	Yes	No	Yes
Story1	B88	82	No	No	No	No	No	No	Yes	No	Yes
Story1	B89	89	No	No	No	No	No	No	Yes	No	Yes
Story1	B90	90	No	No	No	No	No	No	Yes	No	Yes
Story1	B91	91	No	No	No	No	No	No	Yes	No	Yes
Story1	B92	92	No	No	No	No	No	No	Yes	No	Yes
Story1	B93	93	No	No	No	No	No	No	Yes	No	Yes
Story1	B94	94	No	No	No	No	No	No	Yes	No	Yes
Story1	B95	95	No	No	No	No	No	No	Yes	No	Yes
Story1	B96	96	No	No	No	No	No	No	Yes	No	Yes
Story1	B97	97	No	No	No	No	No	No	Yes	No	Yes
Story1	B98	98	No	No	No	No	No	No	Yes	No	Yes
Story1	B99	99	No	No	No	No	No	No	Yes	No	Yes
Story1	B100	100	No	No	No	No	No	No	Yes	No	Yes
Story1	B101	101	No	No	No	No	No	No	Yes	No	Yes
Story1	B102	102	No	No	No	No	No	No	Yes	No	Yes
Story1	B103	103	No	No	No	No	No	No	Yes	No	Yes
Story1	B104	21	No	No	No	No	No	No	Yes	No	Yes
Story1	B36	104	No	No	No	No	No	No	Yes	No	Yes

**Table 3.4 - Frame Assignments - Releases and Partial Fixity (Part 1 of 2, continued)**

Story	Label	UniqueName	PI	PJ	V2I	V2J	V3I	V3J	TI	TJ	M2I
Story1	B105	105	No	No	No	No	No	No	Yes	No	Yes
Story1	B106	106	No	No	No	No	No	No	Yes	No	Yes
Story1	B107	107	No	No	No	No	No	No	Yes	No	Yes
Story1	B108	150	No	No	No	No	No	No	Yes	No	Yes
Story1	B109	151	No	No	No	No	No	No	Yes	No	Yes
Story1	B110	152	No	No	No	No	No	No	Yes	No	Yes
Story1	B111	147	No	No	No	No	No	No	Yes	No	Yes
Story1	B112	148	No	No	No	No	No	No	Yes	No	Yes
Story1	B113	149	No	No	No	No	No	No	Yes	No	Yes
Story1	B118	146	No	No	No	No	No	No	Yes	No	Yes
Story1	B119	145	No	No	No	No	No	No	Yes	No	Yes
Story1	B120	144	No	No	No	No	No	No	Yes	No	Yes
Story1	B121	141	No	No	No	No	No	No	Yes	No	Yes
Story1	B122	142	No	No	No	No	No	No	Yes	No	Yes
Story1	B123	143	No	No	No	No	No	No	Yes	No	Yes
Story1	B124	124	No	No	No	No	No	No	Yes	No	Yes
Story1	B125	125	No	No	No	No	No	No	Yes	No	Yes
Story1	B126	128	No	No	No	No	No	No	Yes	No	Yes
Story1	B127	129	No	No	No	No	No	No	Yes	No	Yes
Story1	B128	130	No	No	No	No	No	No	Yes	No	Yes
Story1	B129	131	No	No	No	No	No	No	Yes	No	Yes
Story1	B133	135	No	No	No	No	No	No	Yes	No	Yes
Story1	B134	136	No	No	No	No	No	No	Yes	No	Yes
Story1	B135	137	No	No	No	No	No	No	Yes	No	Yes
Story1	B136	138	No	No	No	No	No	No	Yes	No	Yes
Story1	B137	139	No	No	No	No	No	No	Yes	No	Yes
Story1	B138	140	No	No	No	No	No	No	Yes	No	Yes
Story1	C1	126	No	No	No	No	No	No	Yes	No	Yes
Story1	C2	127	No	No	No	No	No	No	Yes	No	Yes

**Table 3.4 - Frame Assignments - Releases and Partial Fixity (Part 2 of 2)**

M2J	M3I	M3J
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No
Yes	Yes	No









**Table 3.5 - Frame Assignments - Frame Auto Mesh Options (continued)**

Story	Label	UniqueName	Auto Mesh	At Intermediate Joints	At Intersections	Min Number?	Max Length?
Story1	B18	18	Yes	Yes	Yes	No	No
Story1	B4	73	Yes	Yes	Yes	No	No
Story1	B8	74	Yes	Yes	Yes	No	No
Story1	B9	75	Yes	Yes	Yes	No	No
Story1	B19	76	Yes	Yes	Yes	No	No
Story1	B20	77	Yes	Yes	Yes	No	No
Story1	B21	78	Yes	Yes	Yes	No	No
Story1	B22	79	Yes	Yes	Yes	No	No
Story1	B23	80	Yes	Yes	Yes	No	No
Story1	B24	81	Yes	Yes	Yes	No	No
Story1	B25	83	Yes	Yes	Yes	No	No
Story1	B26	84	Yes	Yes	Yes	No	No
Story1	B27	85	Yes	Yes	Yes	No	No
Story1	B28	86	Yes	Yes	Yes	No	No
Story1	B29	87	Yes	Yes	Yes	No	No
Story1	B30	88	Yes	Yes	Yes	No	No
Story1	B43	43	Yes	Yes	Yes	No	No
Story1	B44	44	Yes	Yes	Yes	No	No
Story1	B45	45	Yes	Yes	Yes	No	No
Story1	B46	46	Yes	Yes	Yes	No	No
Story1	B47	47	Yes	Yes	Yes	No	No
Story1	B48	48	Yes	Yes	Yes	No	No
Story1	B49	49	Yes	Yes	Yes	No	No
Story1	B50	50	Yes	Yes	Yes	No	No
Story1	B51	51	Yes	Yes	Yes	No	No
Story1	B52	52	Yes	Yes	Yes	No	No
Story1	B53	53	Yes	Yes	Yes	No	No
Story1	B54	54	Yes	Yes	Yes	No	No
Story1	B55	55	Yes	Yes	Yes	No	No
Story1	B56	56	Yes	Yes	Yes	No	No
Story1	B57	57	Yes	Yes	Yes	No	No
Story1	B58	31	Yes	Yes	Yes	No	No
Story1	B59	32	Yes	Yes	Yes	No	No
Story1	B60	33	Yes	Yes	Yes	No	No
Story1	B61	34	Yes	Yes	Yes	No	No
Story1	B62	35	Yes	Yes	Yes	No	No
Story1	B63	36	Yes	Yes	Yes	No	No
Story1	B64	37	Yes	Yes	Yes	No	No
Story1	B65	38	Yes	Yes	Yes	No	No
Story1	B66	39	Yes	Yes	Yes	No	No
Story1	B67	40	Yes	Yes	Yes	No	No
Story1	B68	41	Yes	Yes	Yes	No	No
Story1	B69	42	Yes	Yes	Yes	No	No
Story1	B70	58	Yes	Yes	Yes	No	No

**Table 3.5 - Frame Assignments - Frame Auto Mesh Options (continued)**

Story	Label	UniqueName	Auto Mesh	At Intermediate Joints	At Intersections	Min Number?	Max Length?
Story1	B71	59	Yes	Yes	Yes	No	No
Story1	B72	60	Yes	Yes	Yes	No	No
Story1	B73	61	Yes	Yes	Yes	No	No
Story1	B74	62	Yes	Yes	Yes	No	No
Story1	B75	63	Yes	Yes	Yes	No	No
Story1	B76	64	Yes	Yes	Yes	No	No
Story1	B77	65	Yes	Yes	Yes	No	No
Story1	B78	66	Yes	Yes	Yes	No	No
Story1	B79	67	Yes	Yes	Yes	No	No
Story1	B80	68	Yes	Yes	Yes	No	No
Story1	B81	69	Yes	Yes	Yes	No	No
Story1	B82	70	Yes	Yes	Yes	No	No
Story1	B83	71	Yes	Yes	Yes	No	No
Story1	B84	72	Yes	Yes	Yes	No	No
Story1	B31	4	Yes	Yes	Yes	No	No
Story1	B32	8	Yes	Yes	Yes	No	No
Story1	B33	9	Yes	Yes	Yes	No	No
Story1	B34	19	Yes	Yes	Yes	No	No
Story1	B35	20	Yes	Yes	Yes	No	No
Story1	B37	22	Yes	Yes	Yes	No	No
Story1	B38	23	Yes	Yes	Yes	No	No
Story1	B39	24	Yes	Yes	Yes	No	No
Story1	B40	25	Yes	Yes	Yes	No	No
Story1	B41	26	Yes	Yes	Yes	No	No
Story1	B42	27	Yes	Yes	Yes	No	No
Story1	B85	28	Yes	Yes	Yes	No	No
Story1	B86	29	Yes	Yes	Yes	No	No
Story1	B87	30	Yes	Yes	Yes	No	No
Story1	B88	82	Yes	Yes	Yes	No	No
Story1	B89	89	Yes	Yes	Yes	No	No
Story1	B90	90	Yes	Yes	Yes	No	No
Story1	B91	91	Yes	Yes	Yes	No	No
Story1	B92	92	Yes	Yes	Yes	No	No
Story1	B93	93	Yes	Yes	Yes	No	No
Story1	B94	94	Yes	Yes	Yes	No	No
Story1	B95	95	Yes	Yes	Yes	No	No
Story1	B96	96	Yes	Yes	Yes	No	No
Story1	B97	97	Yes	Yes	Yes	No	No
Story1	B98	98	Yes	Yes	Yes	No	No
Story1	B99	99	Yes	Yes	Yes	No	No
Story1	B100	100	Yes	Yes	Yes	No	No
Story1	B101	101	Yes	Yes	Yes	No	No
Story1	B102	102	Yes	Yes	Yes	No	No
Story1	B103	103	Yes	Yes	Yes	No	No

**Table 3.5 - Frame Assignments - Frame Auto Mesh Options (continued)**

Story	Label	UniqueName	Auto Mesh	At Intermediate Joints	At Intersections	Min Number?	Max Length?
Story1	B104	21	Yes	Yes	Yes	No	No
Story1	B36	104	Yes	Yes	Yes	No	No
Story1	B105	105	Yes	Yes	Yes	No	No
Story1	B106	106	Yes	Yes	Yes	No	No
Story1	B107	107	Yes	Yes	Yes	No	No
Story1	B108	150	Yes	Yes	Yes	No	No
Story1	B109	151	Yes	Yes	Yes	No	No
Story1	B110	152	Yes	Yes	Yes	No	No
Story1	B111	147	Yes	Yes	Yes	No	No
Story1	B112	148	Yes	Yes	Yes	No	No
Story1	B113	149	Yes	Yes	Yes	No	No
Story1	B114	114	Yes	Yes	Yes	No	No
Story1	B115	115	Yes	Yes	Yes	No	No
Story1	B116	116	Yes	Yes	Yes	No	No
Story1	B117	117	Yes	Yes	Yes	No	No
Story1	B118	146	Yes	Yes	Yes	No	No
Story1	B119	145	Yes	Yes	Yes	No	No
Story1	B120	144	Yes	Yes	Yes	No	No
Story1	B121	141	Yes	Yes	Yes	No	No
Story1	B122	142	Yes	Yes	Yes	No	No
Story1	B123	143	Yes	Yes	Yes	No	No
Story1	B124	124	Yes	Yes	Yes	No	No
Story1	B125	125	Yes	Yes	Yes	No	No
Story1	B126	128	Yes	Yes	Yes	No	No
Story1	B127	129	Yes	Yes	Yes	No	No
Story1	B128	130	Yes	Yes	Yes	No	No
Story1	B129	131	Yes	Yes	Yes	No	No
Story1	B131	133	Yes	Yes	Yes	No	No
Story1	B132	134	Yes	Yes	Yes	No	No
Story1	B133	135	Yes	Yes	Yes	No	No
Story1	B134	136	Yes	Yes	Yes	No	No
Story1	B135	137	Yes	Yes	Yes	No	No
Story1	B136	138	Yes	Yes	Yes	No	No
Story1	B137	139	Yes	Yes	Yes	No	No
Story1	B138	140	Yes	Yes	Yes	No	No
Story1	B139	108	Yes	Yes	Yes	No	No
Story1	B140	109	Yes	Yes	Yes	No	No
Story1	B141	110	Yes	Yes	Yes	No	No
Story1	C1	126	Yes	Yes	Yes	No	No
Story1	C2	127	Yes	Yes	Yes	No	No

**3.3 Shell Assignments**

**Table 3.6 - Area Assignments - Summary**

Story	Label	UniqueName	Section Property	Property Type	Diaphragm	Added Mass lb-s2/ft3	Pier
Story1	F1	1	Roof 20 gage	Slab	D1	0.97	
Story1	W25	8	W7.25C3.5X50	Wall			PyL-02
Story1	W52	12	W7.25C3.5X50	Wall			PyL-06
Story1	W56	14	W7.25C3.5X50	Wall			PyL-08
Story1	W60	15	W7.25C3.5X50	Wall			PyL-09
Story1	W71	5	W7.25C3.5X50	Wall			PyL-01
Story1	W72	13	W7.25C3.5X50	Wall			PyL-07
Story1	W10	43	W7.25C3.5X50	Wall			Px13-06
Story1	W13	44	W7.25C3.5X50	Wall			Px13-05
Story1	W16	45	W7.25C3.5X50	Wall			Px13-04
Story1	W20	46	W7.25C3.5X50	Wall			Px13-03
Story1	W42	47	W7.25C3.5X50	Wall			Px13-02
Story1	W76	9	W7.25C3.5X50	Wall			PyL-03
Story1	W78	49	W7.25C3.5X50	Wall			Px13-01
Story1	W7	25	W7.25C3.5X50	Wall			Px1-02
Story1	W9	24	W7.25C3.5X50	Wall			Px1-03
Story1	W12	23	W7.25C3.5X50	Wall			Px1-04
Story1	W17	22	W7.25C3.5X50	Wall			Px1-05
Story1	W19	19	W7.25C3.5X50	Wall			Px1-07
Story1	W22	18	W7.25C3.5X50	Wall			Px1-08
Story1	W33	17	W7.25C3.5X50	Wall			Px1-09
Story1	W3	38	W7.25C3.5X50	Wall			PyA-02
Story1	W6	37	W7.25C3.5X50	Wall			PyA-03
Story1	W11	39	W7.25C3.5X50	Wall			PyA-01
Story1	W15	36	W7.25C3.5X50	Wall			PyA-04
Story1	W21	35	W7.25C3.5X50	Wall			PyA-05
Story1	W27	32	W7.25C3.5X50	Wall			PyA-08
Story1	W35	31	W7.25C3.5X50	Wall			PyA-09
Story1	W39	29	W7.25C3.5X50	Wall			PyA-11
Story1	W41	28	W7.25C3.5X50	Wall			PyA-12
Story1	W43	27	W7.25C3.5X50	Wall			PyA-13
Story1	W23	40	W7.25C3.5X50	Wall			Px13-09
Story1	W32	51	W7.25C3.5X50	Wall			PyA-10
Story1	W38	52	W7.25C3.5X50	Wall			PyA-10
Story1	W40	53	W7.25C3.5X50	Wall			PyA-10
Story1	W44	54	W7.25C3.5X50	Wall			PyA-10
Story1	W45	55	W7.25C3.5X50	Wall			PyA-10
Story1	W46	56	W7.25C3.5X50	Wall			PyA-06
Story1	W47	57	W7.25C3.5X50	Wall			PyA-06
Story1	W48	58	W7.25C3.5X50	Wall			PyA-06
Story1	W49	59	W7.25C3.5X50	Wall			PyA-06
Story1	W50	60	W7.25C3.5X50	Wall			PyA-06
Story1	W51	61	W7.25C3.5X50	Wall			PyA-06
Story1	W53	62	W7.25C3.5X50	Wall			PyA-06

**Table 3.6 - Area Assignments - Summary (continued)**

Story	Label	UniqueName	Section Property	Property Type	Diaphragm	Added Mass lb-s2/ft3	Pier
Story1	W54	63	W7.25C3.5X50	Wall			PyA-06
Story1	W55	64	W7.25C3.5X50	Wall			PyA-06
Story1	W57	65	W7.25C3.5X50	Wall			PyA-07
Story1	W58	66	W7.25C3.5X50	Wall			PyA-07
Story1	W59	67	W7.25C3.5X50	Wall			PyA-07
Story1	W61	68	W7.25C3.5X50	Wall			Px13-07
Story1	W62	69	W7.25C3.5X50	Wall			Px13-07
Story1	W63	70	W7.25C3.5X50	Wall			Px13-07
Story1	W64	71	W7.25C3.5X50	Wall			Px13-07
Story1	W65	72	W7.25C3.5X50	Wall			Px13-07
Story1	W66	73	W7.25C3.5X50	Wall			Px13-07
Story1	W67	74	W7.25C3.5X50	Wall			Px13-07
Story1	W68	75	W7.25C3.5X50	Wall			Px13-07
Story1	W69	76	W7.25C3.5X50	Wall			Px13-07
Story1	W70	77	W7.25C3.5X50	Wall			Px13-08
Story1	W73	78	W7.25C3.5X50	Wall			Px13-08
Story1	W74	79	W7.25C3.5X50	Wall			Px13-08
Story1	W75	80	W7.25C3.5X50	Wall			PyL-04
Story1	W77	81	W7.25C3.5X50	Wall			PyL-04
Story1	W79	82	W7.25C3.5X50	Wall			PyL-04
Story1	W80	83	W7.25C3.5X50	Wall			PyL-05
Story1	W81	84	W7.25C3.5X50	Wall			PyL-05
Story1	W82	85	W7.25C3.5X50	Wall			PyL-05
Story1	W1	3	W7.25C3.5X50	Wall			
Story1	W2	4	W7.25C3.5X50	Wall			
Story1	W4	6	W7.25C3.5X50	Wall			

**Table 3.7 - Area Assignments - Pier Labels**

Story	Label	UniqueName	Pier Name
Story1	W25	8	PyL-02
Story1	W52	12	PyL-06
Story1	W56	14	PyL-08
Story1	W60	15	PyL-09
Story1	W71	5	PyL-01
Story1	W72	13	PyL-07
Story1	W10	43	Px13-06
Story1	W13	44	Px13-05
Story1	W16	45	Px13-04
Story1	W20	46	Px13-03
Story1	W42	47	Px13-02
Story1	W76	9	PyL-03
Story1	W78	49	Px13-01
Story1	W7	25	Px1-02

**Table 3.7 - Area Assignments - Pier Labels (continued)**

Story	Label	UniqueName	Pier Name
Story1	W9	24	Px1-03
Story1	W12	23	Px1-04
Story1	W17	22	Px1-05
Story1	W19	19	Px1-07
Story1	W22	18	Px1-08
Story1	W33	17	Px1-09
Story1	W3	38	PyA-02
Story1	W6	37	PyA-03
Story1	W11	39	PyA-01
Story1	W15	36	PyA-04
Story1	W21	35	PyA-05
Story1	W27	32	PyA-08
Story1	W35	31	PyA-09
Story1	W39	29	PyA-11
Story1	W41	28	PyA-12
Story1	W43	27	PyA-13
Story1	W23	40	Px13-09
Story1	W32	51	PyA-10
Story1	W38	52	PyA-10
Story1	W40	53	PyA-10
Story1	W44	54	PyA-10
Story1	W45	55	PyA-10
Story1	W46	56	PyA-06
Story1	W47	57	PyA-06
Story1	W48	58	PyA-06
Story1	W49	59	PyA-06
Story1	W50	60	PyA-06
Story1	W51	61	PyA-06
Story1	W53	62	PyA-06
Story1	W54	63	PyA-06
Story1	W55	64	PyA-06
Story1	W57	65	PyA-07
Story1	W58	66	PyA-07
Story1	W59	67	PyA-07
Story1	W61	68	Px13-07
Story1	W62	69	Px13-07
Story1	W63	70	Px13-07
Story1	W64	71	Px13-07
Story1	W65	72	Px13-07
Story1	W66	73	Px13-07
Story1	W67	74	Px13-07
Story1	W68	75	Px13-07
Story1	W69	76	Px13-07
Story1	W70	77	Px13-08
Story1	W73	78	Px13-08



**Table 3.7 - Area Assignments - Pier Labels (continued)**

<b>Story</b>	<b>Label</b>	<b>UniqueName</b>	<b>Pier Name</b>
Story1	W74	79	Px13-08
Story1	W75	80	PyL-04
Story1	W77	81	PyL-04
Story1	W79	82	PyL-04
Story1	W80	83	PyL-05
Story1	W81	84	PyL-05
Story1	W82	85	PyL-05

## 4 Loads

This chapter provides loading information as applied to the model.

### 4.1 Load Patterns

**Table 4.1 - Load Pattern Definitions**

Name	Is Auto Load	Type	Self Weight Multiplier	Auto Load
~LLRF	Yes	Other	0	
EQX	No	Seismic	0	ASCE 7-10
EQY	No	Seismic	0	ASCE 7-10
Live	No	Live	0	
Self Weight	No	Dead	1	
Super Dead	No	Super Dead	0	

### 4.2 Auto Seismic Loading

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQX according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = X

### Structural Period

Period Calculation Method = Program Calculated

Coefficient,  $C_t$  [ASCE Table 12.8-2]  $C_t = 0.02ft$

Coefficient,  $x$  [ASCE Table 12.8-2]  $x = 0.75$

Structure Height Above Base,  $h_n$   $h_n = 20 ft$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]  $T_L = 8 sec$

### Factors and Coefficients

Response Modification Factor,  $R$  [ASCE Table 12.2-1]  $R = 4$

System Overstrength Factor,  $\Omega_0$  [ASCE Table 12.2-1]  $\Omega_0 = 3$

Deflection Amplification Factor,  $C_d$  [ASCE Table 12.2-1]  $C_d = 5.5$

Importance Factor,  $I$  [ASCE Table 11.5-1]  $I = 1.25$

$S_s$  and  $S_1$  Source = User Specified

Mapped MCE Spectral Response Acceleration,  $S_s$  [ASCE 11.4.1]  $S_s = 1.248g$

Mapped MCE Spectral Response Acceleration,  $S_1$  [ASCE 11.4.1]  $S_1 = 0.48g$

Site Class [ASCE Table 20.3-1] = D - Stiff Soil

Site Coefficient,  $F_a$  [ASCE Table 11.4-1]  $F_a = 1.0008$

Site Coefficient,  $F_v$  [ASCE Table 11.4-2]  $F_v = 1.52$

### Seismic Response

MCE Spectral Response Acceleration,  $S_{MS}$  [ASCE 11.4.3, Eq. 11.4-1]  $S_{MS} = F_a S_s$   $S_{MS} = 1.248998g$

MCE Spectral Response Acceleration,  $S_{M1}$  [ASCE 11.4.3, Eq. 11.4-2]  $S_{M1} = F_v S_1$   $S_{M1} = 0.7296g$

Design Spectral Response Acceleration,  $S_{DS}$  [ASCE 11.4.4, Eq. 11.4-3]  $S_{DS} = \frac{2}{3} S_{MS}$   $S_{DS} = 0.832666g$

Design Spectral Response Acceleration,  $S_{D1}$  [ASCE 11.4.4, Eq. 11.4-4]  $S_{D1} = \frac{2}{3} S_{M1}$   $S_{D1} = 0.4864g$

**Equivalent Lateral Forces**

Seismic Response Coefficient,  $C_s$  [ASCE 12.8.1.1, Eq. 12.8-2]

$$C_s = \frac{S_{DS}}{\left(\frac{R}{I}\right)}$$

[ASCE 12.8.1.1, Eq. 12.8-3]

$$C_{s,max} = \frac{S_{D1}}{T\left(\frac{R}{I}\right)}$$

[ASCE 12.8.1.1, Eq. 12.8-5]

$$C_{s,min} = \max ( 0.044 S_{DS} / 0.01 ) = 0.045797$$

[ASCE 12.8.1.1, Eq. 12.8-6]

$$C_{s,min} = 0.5 \frac{S_1}{\left(\frac{R}{I}\right)} \text{ for } S_1 = 0.6g$$

$$C_{s,min} \leq C_s \leq C_{s,max}$$

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
X	0.076	0.260208	2554.2534	664.6372

**Applied Story Forces**



Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
Story1	20	665	0
Base	0	0	0

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQY according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = Y

### Structural Period

Period Calculation Method = Program Calculated

Coefficient,  $C_t$  [ASCE Table 12.8-2]  $C_t = 0.02ft$

Coefficient,  $x$  [ASCE Table 12.8-2]  $x = 0.75$

Structure Height Above Base,  $h_n$   $h_n = 20 ft$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]  $T_L = 8 sec$

### Factors and Coefficients

Response Modification Factor,  $R$  [ASCE Table 12.2-1]  $R = 4$

System Overstrength Factor,  $\Omega_0$  [ASCE Table 12.2-1]  $\Omega_0 = 3$

Deflection Amplification Factor,  $C_d$  [ASCE Table 12.2-1]  $C_d = 5.5$

Importance Factor,  $I$  [ASCE Table 11.5-1]  $I = 1.25$

Ss and S1 Source = User Specified

Mapped MCE Spectral Response Acceleration,  $S_s$  [ASCE 11.4.1]  $S_s = 1.248g$

Mapped MCE Spectral Response Acceleration,  $S_1$  [ASCE 11.4.1]  $S_1 = 0.48g$

Site Class [ASCE Table 20.3-1] = D - Stiff Soil

Site Coefficient,  $F_a$  [ASCE Table 11.4-1]  $F_a = 1.0008$

Site Coefficient,  $F_v$  [ASCE Table 11.4-2]  $F_v = 1.52$

### Seismic Response

MCE Spectral Response Acceleration,  $S_{MS}$  [ASCE 11.4.3, Eq. 11.4-1]  $S_{MS} = 1.248998g$

$$S_{MS} = F_a S_s$$

MCE Spectral Response Acceleration,  $S_{M1}$  [ASCE 11.4.3, Eq. 11.4-2]  $S_{M1} = 0.7296g$

$$S_{M1} = F_v S_1$$

Design Spectral Response Acceleration,  $S_{DS}$  [ASCE 11.4.4, Eq. 11.4-3]  $S_{DS} = 0.832666g$

$$S_{DS} = \frac{2}{3} S_{MS}$$

Design Spectral Response Acceleration,  $S_{D1}$  [ASCE 11.4.4, Eq. 11.4-4]  $S_{D1} = 0.4864g$

$$S_{D1} = \frac{2}{3} S_{M1}$$

Loads

**Equivalent Lateral Forces**

Seismic Response Coefficient,  $C_s$  [ASCE 12.8.1.1, Eq. 12.8-2]

$$C_s = \frac{S_{DS}}{\left(\frac{R}{I}\right)}$$

[ASCE 12.8.1.1, Eq. 12.8-3]

$$C_{s,max} = \frac{S_{D1}}{T\left(\frac{R}{I}\right)}$$

[ASCE 12.8.1.1, Eq. 12.8-5]

$$C_{s,min} = \max(0.044 S_{DS} I, 0.01) = 0.045797$$

[ASCE 12.8.1.1, Eq. 12.8-6]

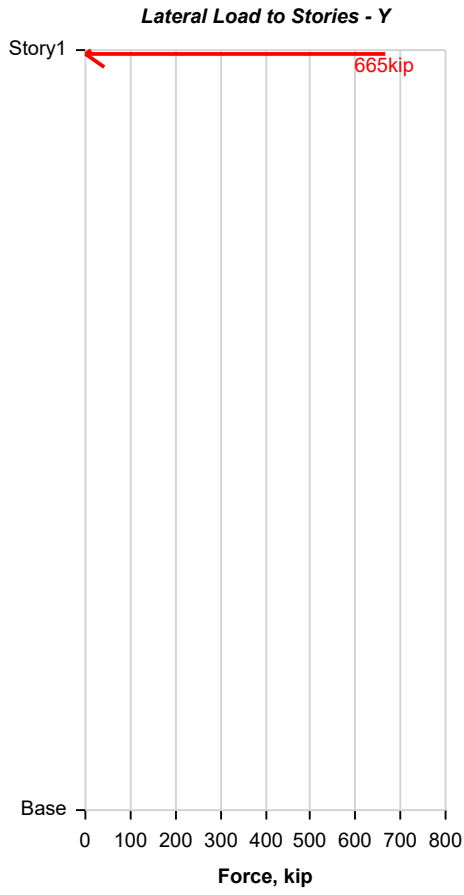
$$C_{s,min} = 0.5 \frac{S_1}{\left(\frac{R}{I}\right)} \text{ for } S_1 = 0.6g$$

$$C_{s,min} \leq C_s \leq C_{s,max}$$

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
Y	0.096	0.260208	2554.2534	664.6372

**Applied Story Forces**



Story	Elevation	X-Dir	Y-Dir
	ft	kip	kip
Story1	20	0	665
Base	0	0	0



### 4.3 Applied Loads

#### 4.3.1 Line Loads

Table 4.4 - Frame Loads Assignments - Distributed (Part 1 of 2)

Story	Label	UniqueName	Load Pattern	Load Type	Direction	Distance Type	Relative Distance A	Relative Distance B	Absolute Distance A ft	Absolute Distance B ft
Story1	B31	4	Self Weight	Force	Gravity	Relative	0	1	0	35
Story1	B32	8	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B33	9	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B34	19	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B35	20	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B37	22	Self Weight	Force	Gravity	Relative	0	1	0	24
Story1	B38	23	Self Weight	Force	Gravity	Relative	0	1	0	26
Story1	B39	24	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B40	25	Self Weight	Force	Gravity	Relative	0	1	0	28
Story1	B41	26	Self Weight	Force	Gravity	Relative	0	1	0	28
Story1	B42	27	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B85	28	Self Weight	Force	Gravity	Relative	0	1	0	39.5
Story1	B86	29	Self Weight	Force	Gravity	Relative	0	1	0	13.5
Story1	B87	30	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B88	82	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B89	89	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B90	90	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B91	91	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B92	92	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B93	93	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B94	94	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B95	95	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B96	96	Self Weight	Force	Gravity	Relative	0	1	0	13.5
Story1	B97	97	Self Weight	Force	Gravity	Relative	0	1	0	13.5
Story1	B98	98	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B99	99	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B100	100	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B101	101	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B102	102	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B103	103	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B104	21	Self Weight	Force	Gravity	Relative	0	1	0	13.5
Story1	B36	104	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B105	105	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B106	106	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B107	107	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B124	124	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B125	125	Self Weight	Force	Gravity	Relative	0	1	0	25
Story1	B139	108	Self Weight	Force	Gravity	Relative	0	1	0	9.5
Story1	B140	109	Self Weight	Force	Gravity	Relative	0	1	0	26
Story1	B141	110	Self Weight	Force	Gravity	Relative	0	1	0	9.5
Story1	B31	4	Live	Force	Gravity	Relative	0	1	0	35

Table 4.4 - Frame Loads Assignments - Distributed (Part 1 of 2, continued)

Story	Label	UniqueName	Load Pattern	Load Type	Direction	Distance Type	Relative Distance A	Relative Distance B	Absolute Distance A ft	Absolute Distance B ft
Story1	B32	8	Live	Force	Gravity	Relative	0	1	0	25
Story1	B33	9	Live	Force	Gravity	Relative	0	1	0	25
Story1	B34	19	Live	Force	Gravity	Relative	0	1	0	25
Story1	B35	20	Live	Force	Gravity	Relative	0	1	0	25
Story1	B37	22	Live	Force	Gravity	Relative	0	1	0	24
Story1	B38	23	Live	Force	Gravity	Relative	0	1	0	26
Story1	B39	24	Live	Force	Gravity	Relative	0	1	0	25
Story1	B40	25	Live	Force	Gravity	Relative	0	1	0	28
Story1	B41	26	Live	Force	Gravity	Relative	0	1	0	28
Story1	B42	27	Live	Force	Gravity	Relative	0	1	0	25
Story1	B85	28	Live	Force	Gravity	Relative	0	1	0	39.5
Story1	B86	29	Live	Force	Gravity	Relative	0	1	0	13.5
Story1	B87	30	Live	Force	Gravity	Relative	0	1	0	25
Story1	B88	82	Live	Force	Gravity	Relative	0	1	0	25
Story1	B89	89	Live	Force	Gravity	Relative	0	1	0	25
Story1	B90	90	Live	Force	Gravity	Relative	0	1	0	25
Story1	B91	91	Live	Force	Gravity	Relative	0	1	0	25
Story1	B92	92	Live	Force	Gravity	Relative	0	1	0	25
Story1	B93	93	Live	Force	Gravity	Relative	0	1	0	25
Story1	B94	94	Live	Force	Gravity	Relative	0	1	0	25
Story1	B95	95	Live	Force	Gravity	Relative	0	1	0	25
Story1	B96	96	Live	Force	Gravity	Relative	0	1	0	13.5
Story1	B97	97	Live	Force	Gravity	Relative	0	1	0	13.5
Story1	B98	98	Live	Force	Gravity	Relative	0	1	0	25
Story1	B99	99	Live	Force	Gravity	Relative	0	1	0	25
Story1	B100	100	Live	Force	Gravity	Relative	0	1	0	25
Story1	B101	101	Live	Force	Gravity	Relative	0	1	0	25
Story1	B102	102	Live	Force	Gravity	Relative	0	1	0	25
Story1	B103	103	Live	Force	Gravity	Relative	0	1	0	25
Story1	B104	21	Live	Force	Gravity	Relative	0	1	0	13.5
Story1	B36	104	Live	Force	Gravity	Relative	0	1	0	25
Story1	B105	105	Live	Force	Gravity	Relative	0	1	0	25
Story1	B106	106	Live	Force	Gravity	Relative	0	1	0	25
Story1	B107	107	Live	Force	Gravity	Relative	0	1	0	25
Story1	B124	124	Live	Force	Gravity	Relative	0	1	0	25
Story1	B125	125	Live	Force	Gravity	Relative	0	1	0	25
Story1	B139	108	Live	Force	Gravity	Relative	0	1	0	9.5
Story1	B140	109	Live	Force	Gravity	Relative	0	1	0	26
Story1	B141	110	Live	Force	Gravity	Relative	0	1	0	9.5
Story1	B31	4	Super Dead	Force	Gravity	Relative	0	1	0	35
Story1	B32	8	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B33	9	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B34	19	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B35	20	Super Dead	Force	Gravity	Relative	0	1	0	25

**Table 4.4 - Frame Loads Assignments - Distributed (Part 1 of 2, continued)**

Story	Label	UniqueName	Load Pattern	Load Type	Direction	Distance Type	Relative Distance A	Relative Distance B	Absolute Distance A ft	Absolute Distance B ft
Story1	B37	22	Super Dead	Force	Gravity	Relative	0	1	0	24
Story1	B38	23	Super Dead	Force	Gravity	Relative	0	1	0	26
Story1	B39	24	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B40	25	Super Dead	Force	Gravity	Relative	0	1	0	28
Story1	B41	26	Super Dead	Force	Gravity	Relative	0	1	0	28
Story1	B42	27	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B85	28	Super Dead	Force	Gravity	Relative	0	1	0	39.5
Story1	B86	29	Super Dead	Force	Gravity	Relative	0	1	0	13.5
Story1	B87	30	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B88	82	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B89	89	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B90	90	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B91	91	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B92	92	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B93	93	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B94	94	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B95	95	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B96	96	Super Dead	Force	Gravity	Relative	0	1	0	13.5
Story1	B97	97	Super Dead	Force	Gravity	Relative	0	1	0	13.5
Story1	B98	98	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B99	99	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B100	100	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B101	101	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B102	102	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B103	103	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B104	21	Super Dead	Force	Gravity	Relative	0	1	0	13.5
Story1	B36	104	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B105	105	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B106	106	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B107	107	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B124	124	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B125	125	Super Dead	Force	Gravity	Relative	0	1	0	25
Story1	B139	108	Super Dead	Force	Gravity	Relative	0	1	0	9.5
Story1	B140	109	Super Dead	Force	Gravity	Relative	0	1	0	26
Story1	B141	110	Super Dead	Force	Gravity	Relative	0	1	0	9.5

**Table 4.4 - Frame Loads Assignments - Distributed (Part 2 of 2)**

Force A lb/ft	Force B lb/ft
1903	1903
1903	1903
1903	1903
1903	1903



**Table 4.4 - Frame Loads Assignments - Distributed (Part 2 of 2, continued)**

<b>Force A lb/ft</b>	<b>Force B lb/ft</b>
325	325
325	325
325	325
325	325
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
325	325
65.6	65.6
65.6	65.6
65.6	65.6
65.6	65.6
325	325
325	325
325	325
325	325
325	325
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9

**Table 4.4 - Frame Loads Assignments - Distributed (Part 2 of 2, continued)**

Force A lb/ft	Force B lb/ft
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
224.9	224.9
40.2	40.2
40.2	40.2
40.2	40.2
40.2	40.2
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9
224.9	224.9

**4.4 Functions**

**4.4.1 Response Spectrum Functions**

**Table 4.5 - Functions - Response Spectrum - ASCE7-10 (Part 1 of 2)**

Name	Period sec	Value	Ss And S1 From	Ss	S1	TL sec	Site Class	Fa	Fv	SDS
ASCE 7-10 Site Class D	0	0.364533	User Defined	1.367	0.516	6	C	1	1.3	0.911333
ASCE 7-10 Site Class D	0.098	0.911333								
ASCE 7-10 Site Class D	0.491	0.911333								
ASCE 7-10 Site Class D	0.6	0.745333								
ASCE 7-10 Site Class D	0.8	0.559								
ASCE 7-10 Site Class D	1	0.4472								
ASCE 7-10 Site Class D	1.2	0.372667								
ASCE 7-10 Site Class D	1.4	0.319429								
ASCE 7-10 Site Class D	1.6	0.2795								
ASCE 7-10 Site Class D	1.8	0.248444								

**Table 4.5 - Functions - Response Spectrum - ASCE7-10 (Part 1 of 2, continued)**

Name	Period sec	Value	Ss And S1 From	Ss	S1	TL sec	Site Class	Fa	Fv	SDS
ASCE 7-10 Site Class D	2	0.2236								
ASCE 7-10 Site Class D	2.5	0.17888								
ASCE 7-10 Site Class D	3	0.149067								
ASCE 7-10 Site Class D	3.5	0.127771								
ASCE 7-10 Site Class D	4	0.1118								
ASCE 7-10 Site Class D	4.5	0.099378								
ASCE 7-10 Site Class D	5	0.08944								
ASCE 7-10 Site Class D	5.5	0.081309								
ASCE 7-10 Site Class D	6	0.074533								
ASCE 7-10 Site Class D	6.5	0.063508								
ASCE 7-10 Site Class D	7	0.054759								
ASCE 7-10 Site Class D	7.5	0.047701								
ASCE 7-10 Site Class D	8	0.041925								
ASCE 7-10 Site Class D	8.5	0.037138								
ASCE 7-10 Site Class D	9	0.033126								
ASCE 7-10 Site Class D	9.5	0.029731								
ASCE 7-10 Site Class D	10	0.026832								

**Table 4.5 - Functions - Response Spectrum - ASCE7-10 (Part 2 of 2)**

SD1	Damping Ratio
0.4472	0.05

Table 4.5 - Functions - Response Spectrum - ASCE7-10 (Part 2 of 2, continued)

SD1	Damping Ratio

Table 4.6 - Functions - Response Spectrum - User Defined

Name	Period sec	Value	Damping Ratio
UnifRS	0	1	0.05
UnifRS	1	1	

4.4.2 Time History Functions

Table 4.7 - Functions - Time History - User Defined

Name	Time sec	Value
RampTH	0	0
RampTH	1	1
RampTH	4	1
UnifTH	0	1
UnifTH	1	1

4.5 Load Cases

Table 4.8 - Load Case Definitions - Summary

Name	Type
Modal	Modal - Eigen
Self Weight	Linear Static
Super Dead	Linear Static
Live	Linear Static
EQX	Linear Static
EQY	Linear Static

4.6 Load Combinations

Table 4.9 - Load Combination Definitions

Name	Type	Is Auto	Load Name	SF	Notes
0.9D + LSPX <sub>m=1.5</sub>	Linear Add	No	Dead	0.9	
0.9D + LSPX <sub>m=3</sub>	Linear Add	No	Dead	0.9	
0.9D + LSPY <sub>m=1.5</sub>	Linear Add	No	Dead	0.9	
0.9D + LSPY <sub>m=3</sub>	Linear Add	No	Dead	0.9	
1.1D + LSPX <sub>m=1.5</sub>	Linear Add	No	Dead	1.1	
1.1D + LSPX <sub>m=3</sub>	Linear Add	No	Dead	1.1	
1.1D + LSPY <sub>m=1.5</sub>	Linear Add	No	Dead	1.1	
1.1D + LSPY <sub>m=3</sub>	Linear Add	No	Dead	1.1	
ASCE7-10 LRFD5 x-dir neg	Linear Add	No	Super Dead	1.367	
ASCE7-10 LRFD5 x-dir neg			EQX	-1	
ASCE7-10 LRFD5 x-dir neg			Live	1	



**Table 4.9 - Load Combination Definitions (continued)**

Name	Type	Is Auto	Load Name	SF	Notes
ASCE7-10 LRFD5 x-dir neg			Self Weight	1.367	
ASCE7-10 LRFD5 x-dir pos	Linear Add	No	Super Dead	1.367	
ASCE7-10 LRFD5 x-dir pos			EQX	1	
ASCE7-10 LRFD5 x-dir pos			Live	1	
ASCE7-10 LRFD5 x-dir pos			Self Weight	1.367	
ASCE7-10 LRFD5 y-dir neg	Linear Add	No	Super Dead	1.367	
ASCE7-10 LRFD5 y-dir neg			EQY	-1	
ASCE7-10 LRFD5 y-dir neg			Live	1	
ASCE7-10 LRFD5 y-dir neg			Self Weight	1.367	
ASCE7-10 LRFD5 y-dir pos	Linear Add	No	Super Dead	1.367	
ASCE7-10 LRFD5 y-dir pos			EQY	1	
ASCE7-10 LRFD5 y-dir pos			Live	1	
ASCE7-10 LRFD5 y-dir pos			Self Weight	1.367	
ASCE7-10 LRFD7 x-dir neg	Linear Add	No	EQX	-1	
ASCE7-10 LRFD7 x-dir neg			Super Dead	0.733	
ASCE7-10 LRFD7 x-dir neg			Self Weight	0.733	
ASCE7-10 LRFD7 x-dir pos	Linear Add	No	EQX	1	
ASCE7-10 LRFD7 x-dir pos			Super Dead	0.733	
ASCE7-10 LRFD7 x-dir pos			Self Weight	0.733	
ASCE7-10 LRFD7 y-dir neg	Linear Add	No	EQY	-1	
ASCE7-10 LRFD7 y-dir neg			Super Dead	0.733	
ASCE7-10 LRFD7 y-dir neg			Self Weight	0.733	
ASCE7-10 LRFD7 y-dir pos	Linear Add	No	EQY	1	
ASCE7-10 LRFD7 y-dir pos			Super Dead	0.733	
ASCE7-10 LRFD7 y-dir pos			Self Weight	0.733	
Dead	Linear Add	No	Self Weight	1	
Dead			Super Dead	1	
DWals1	Linear Add	Yes	Self Weight	1.4	Dead [Strength]
DWals1			Super Dead	1.4	
DWals2	Linear Add	Yes	Self Weight	1.2	Dead + Live [Strength]
DWals2			Super Dead	1.2	
DWals2			Live	1.6	
DWals3	Linear Add	Yes	Self Weight	1.3726	Dead + Live + Static Earthquake [Strength]
DWals3			Super Dead	1.3726	
DWals3			Live	1	
DWals3			EQX	1	
DWals4	Linear Add	Yes	Self Weight	1.3726	Dead + Live - Static Earthquake [Strength]
DWals4			Super Dead	1.3726	
DWals4			Live	1	
DWals4			EQX	-1	
DWals5	Linear Add	Yes	Self Weight	1.3726	Dead + Live + Static Earthquake [Strength]
DWals5			Super Dead	1.3726	
DWals5			Live	1	
DWals5			EQY	1	
DWals6	Linear Add	Yes	Self Weight	1.3726	Dead + Live - Static Earthquake [Strength]
DWals6			Super Dead	1.3726	

**Table 4.9 - Load Combination Definitions (continued)**

Name	Type	Is Auto	Load Name	SF	Notes
DWals6			Live	1	
DWals6			EQY	-1	
DWals7	Linear Add	Yes	Self Weight	0.7274	Dead (min) + Static Earthquake [Strength]
DWals7			Super Dead	0.7274	
DWals7			EQX	1	
DWals8	Linear Add	Yes	Self Weight	0.7274	Dead (min) - Static Earthquake [Strength]
DWals8			Super Dead	0.7274	
DWals8			EQX	-1	
DWals9	Linear Add	Yes	Self Weight	0.7274	Dead (min) + Static Earthquake [Strength]
DWals9			Super Dead	0.7274	
DWals9			EQY	1	
DWals10	Linear Add	Yes	Self Weight	0.7274	Dead (min) - Static Earthquake [Strength]
DWals10			Super Dead	0.7274	
DWals10			EQY	-1	
LRFD Envelope	Envelope	No	ASCE7-10 LRFD7 x-dir pos	1	
LRFD Envelope			ASCE7-10 LRFD5 x-dir pos	1	
LRFD Envelope			ASCE7-10 LRFD7 y-dir pos	1	
LRFD Envelope			ASCE7-10 LRFD5 y-dir pos	1	
LRFD Envelope			ASCE7-10 LRFD5 x-dir neg	1	
LRFD Envelope			ASCE7-10 LRFD5 x-dir neg	1	
LRFD Envelope			ASCE7-10 LRFD7 x-dir neg	1	
LRFD Envelope			ASCE7-10 LRFD7 y-dir neg	1	

## 5 Analysis Results

This chapter provides analysis results.

### 5.1 Structure Results

**Table 5.1 - Base Reactions**

Output Case	Case Type	FX kip	FY kip	FZ kip	MX kip-ft	MY kip-ft	MZ kip-ft	X ft	Y ft	Z ft
Self Weight	LinStatic	0	0	1774	221921	-263811	0	0	0	0
Super Dead	LinStatic	0	0	119	16714	-19723	0	0	0	0
Live	LinStatic	0	0	176	24569	-29031	0	0	0	0
EQX	LinStatic	-665	0	0	0	-13293	86403	0	0	0
EQY	LinStatic	0	-665	0	13293	-6.672E-07	-103683	0	0	0
Dead	Combination	0	0	1893	238635	-283533	0	0	0	0

**Table 5.2 - Centers Of Mass And Rigidity**

Story	Diaphragm	Mass X lb-s <sup>2</sup> /ft	Mass Y lb-s <sup>2</sup> /ft	XCM ft	YCM ft	Cum Mass X lb-s <sup>2</sup> /ft	Cum Mass Y lb-s <sup>2</sup> /ft	XCCM ft	YCCM ft	XCR ft	YCR ft
Story1	D1	79388.62	79388.62	156	130	79388.62	79388.62	156	130		

### 5.2 Story Results

**Table 5.3 - Story Max Over Avg Displacements**

Story	Output Case	Case Type	Direction	Maximum in	Average in	Ratio
Story1	Self Weight	LinStatic	X	0.000234	0.000128	1.828
Story1	Self Weight	LinStatic	Y	0.001371	0.001244	1.102
Story1	Super Dead	LinStatic	X	0.000141	7.9E-05	1.784
Story1	Super Dead	LinStatic	Y	0.000203	0.000129	1.576
Story1	Live	LinStatic	X	0.000198	0.000111	1.775
Story1	Live	LinStatic	Y	0.00029	0.000187	1.554
Story1	EQX	LinStatic	X	0.021493	0.018335	1.172
Story1	EQY	LinStatic	Y	0.024888	0.024051	1.035
Story1	Dead	Combination	X	0.000251	0.000207	1.213
Story1	Dead	Combination	Y	0.001426	0.001373	1.038

**Table 5.4 - Story Forces**

Story	Output Case	Case Type	Location	P kip	VX kip	VY kip	T kip-ft	MX kip-ft	MY kip-ft
Story1	Self Weight	LinStatic	Top	1774	0	0	0	221921	-263811
Story1	Self Weight	LinStatic	Bottom	1774	0	0	0	221921	-263811
Story1	Super Dead	LinStatic	Top	119	0	0	0	16714	-19723
Story1	Super Dead	LinStatic	Bottom	119	0	0	0	16714	-19723
Story1	Live	LinStatic	Top	176	0	0	0	24569	-29031
Story1	Live	LinStatic	Bottom	176	0	0	0	24569	-29031
Story1	EQX	LinStatic	Top	0	-665	0	86403	0	0
Story1	EQX	LinStatic	Bottom	0	-665	0	86403	0	-13293
Story1	EQY	LinStatic	Top	0	0	-665	-103683	0	0

**Table 5.4 - Story Forces (continued)**

Story	Output Case	Case Type	Location	P kip	VX kip	VY kip	T kip-ft	MX kip-ft	MY kip-ft
Story1	EQY	LinStatic	Bottom	0	0	-665	-103683	13293	0
Story1	Dead	Combination	Top	1893	0	0	0	238635	-283533
Story1	Dead	Combination	Bottom	1893	0	0	0	238635	-283533

**5.3 Line Results**

**Table 5.5 - Element Forces - Beams (Part 1 of 2)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B1	1	Self Weight	LinStatic	0	1	-0.4809	0	0	0
Story1	B1	1	Self Weight	LinStatic	1	1	-0.4809	0	0	0
Story1	B1	1	Super Dead	LinStatic	0	-0.1393	0.2737	0	0	0
Story1	B1	1	Super Dead	LinStatic	1	-0.1393	0.2737	0	0	0
Story1	B1	1	Live	LinStatic	0	-0.1915	0.3821	0	0	0
Story1	B1	1	Live	LinStatic	1	-0.1915	0.3821	0	0	0
Story1	B1	1	EQX	LinStatic	0	-0.221	10	0	0	0
Story1	B1	1	EQX	LinStatic	1	-0.221	10	0	0	0
Story1	B1	1	EQY	LinStatic	0	-0.3581	1	0	0	0
Story1	B1	1	EQY	LinStatic	1	-0.3581	1	0	0	0
Story1	B1	1	Dead	Combination	0	1	-0.2072	0	0	0
Story1	B1	1	Dead	Combination	1	1	-0.2072	0	0	0
Story1	B2	2	Self Weight	LinStatic	0	-2	-2	0	0	0
Story1	B2	2	Self Weight	LinStatic	1	-2	-2	0	0	0
Story1	B2	2	Super Dead	LinStatic	0	-0.1177	0.2411	0	0	0
Story1	B2	2	Super Dead	LinStatic	1	-0.1177	0.2411	0	0	0
Story1	B2	2	Live	LinStatic	0	-0.1762	0.3309	0	0	0
Story1	B2	2	Live	LinStatic	1	-0.1762	0.3309	0	0	0
Story1	B2	2	EQX	LinStatic	0	0.3174	9	0	0	0
Story1	B2	2	EQX	LinStatic	1	0.3174	9	0	0	0
Story1	B2	2	EQY	LinStatic	0	-0.1059	1	0	0	0
Story1	B2	2	EQY	LinStatic	1	-0.1059	1	0	0	0
Story1	B2	2	Dead	Combination	0	-2	-1	0	0	0
Story1	B2	2	Dead	Combination	1	-2	-1	0	0	0
Story1	B3	3	Self Weight	LinStatic	0	-4	-3	0	0	0
Story1	B3	3	Self Weight	LinStatic	1	-4	-3	0	0	0
Story1	B3	3	Super Dead	LinStatic	0	-0.1009	0.2136	0	0	0
Story1	B3	3	Super Dead	LinStatic	1	-0.1009	0.2136	0	0	0
Story1	B3	3	Live	LinStatic	0	-0.1618	0.2854	0	0	0
Story1	B3	3	Live	LinStatic	1	-0.1618	0.2854	0	0	0
Story1	B3	3	EQX	LinStatic	0	3	9	0	0	0
Story1	B3	3	EQX	LinStatic	1	3	9	0	0	0
Story1	B3	3	EQY	LinStatic	0	-0.09597	0.497	0	0	0
Story1	B3	3	EQY	LinStatic	1	-0.09597	0.497	0	0	0
Story1	B3	3	Dead	Combination	0	-4	-3	0	0	0
Story1	B3	3	Dead	Combination	1	-4	-3	0	0	0
Story1	B5	5	Self Weight	LinStatic	0	0.3163	-0.3944	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B5	5	Self Weight	LinStatic	1	0.3163	-0.3944	0	0	0
Story1	B5	5	Super Dead	LinStatic	0	-0.04555	0.05181	0	0	0
Story1	B5	5	Super Dead	LinStatic	1	-0.04555	0.05181	0	0	0
Story1	B5	5	Live	LinStatic	0	-0.06246	0.07086	0	0	0
Story1	B5	5	Live	LinStatic	1	-0.06246	0.07086	0	0	0
Story1	B5	5	EQX	LinStatic	0	-2	10	0	0	0
Story1	B5	5	EQX	LinStatic	1	-2	10	0	0	0
Story1	B5	5	EQY	LinStatic	0	-0.09781	-0.1249	0	0	0
Story1	B5	5	EQY	LinStatic	1	-0.09781	-0.1249	0	0	0
Story1	B5	5	Dead	Combination	0	0.2707	-0.3426	0	0	0
Story1	B5	5	Dead	Combination	1	0.2707	-0.3426	0	0	0
Story1	B6	6	Self Weight	LinStatic	0	-5	-1	0	0	0
Story1	B6	6	Self Weight	LinStatic	1	-5	-1	0	0	0
Story1	B6	6	Super Dead	LinStatic	0	-0.1588	0.06043	0	0	0
Story1	B6	6	Super Dead	LinStatic	1	-0.1588	0.06043	0	0	0
Story1	B6	6	Live	LinStatic	0	-0.2492	0.0824	0	0	0
Story1	B6	6	Live	LinStatic	1	-0.2492	0.0824	0	0	0
Story1	B6	6	EQX	LinStatic	0	-2	9	0	0	0
Story1	B6	6	EQX	LinStatic	1	-2	9	0	0	0
Story1	B6	6	EQY	LinStatic	0	-0.08512	-0.06651	0	0	0
Story1	B6	6	EQY	LinStatic	1	-0.08512	-0.06651	0	0	0
Story1	B6	6	Dead	Combination	0	-6	-0.4533	0	0	0
Story1	B6	6	Dead	Combination	1	-6	-0.4533	0	0	0
Story1	B7	7	Self Weight	LinStatic	0	-5	-1	0	0	0
Story1	B7	7	Self Weight	LinStatic	1	-5	-1	0	0	0
Story1	B7	7	Super Dead	LinStatic	0	-0.1658	0.0664	0	0	0
Story1	B7	7	Super Dead	LinStatic	1	-0.1658	0.0664	0	0	0
Story1	B7	7	Live	LinStatic	0	-0.2579	0.08907	0	0	0
Story1	B7	7	Live	LinStatic	1	-0.2579	0.08907	0	0	0
Story1	B7	7	EQX	LinStatic	0	-2	8	0	0	0
Story1	B7	7	EQX	LinStatic	1	-2	8	0	0	0
Story1	B7	7	EQY	LinStatic	0	-0.1229	-0.004439	0	0	0
Story1	B7	7	EQY	LinStatic	1	-0.1229	-0.004439	0	0	0
Story1	B7	7	Dead	Combination	0	-5	-1	0	0	0
Story1	B7	7	Dead	Combination	1	-5	-1	0	0	0
Story1	B10	10	Self Weight	LinStatic	0	0.1427	-0.09947	0	0	0
Story1	B10	10	Self Weight	LinStatic	1	0.1427	-0.09947	0	0	0
Story1	B10	10	Super Dead	LinStatic	0	-0.01294	-0.07693	0	0	0
Story1	B10	10	Super Dead	LinStatic	1	-0.01294	-0.07693	0	0	0
Story1	B10	10	Live	LinStatic	0	-0.01749	-0.1085	0	0	0
Story1	B10	10	Live	LinStatic	1	-0.01749	-0.1085	0	0	0
Story1	B10	10	EQX	LinStatic	0	2	11	0	0	0
Story1	B10	10	EQX	LinStatic	1	2	11	0	0	0
Story1	B10	10	EQY	LinStatic	0	-0.1265	-1	0	0	0
Story1	B10	10	EQY	LinStatic	1	-0.1265	-1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B10	10	Dead	Combination	0	0.1298	-0.1764	0	0	0
Story1	B10	10	Dead	Combination	1	0.1298	-0.1764	0	0	0
Story1	B11	11	Self Weight	LinStatic	0	-6	0.013	0	0	0
Story1	B11	11	Self Weight	LinStatic	1	-6	0.013	0	0	0
Story1	B11	11	Super Dead	LinStatic	0	-0.1342	-0.07015	0	0	0
Story1	B11	11	Super Dead	LinStatic	1	-0.1342	-0.07015	0	0	0
Story1	B11	11	Live	LinStatic	0	-0.215	-0.09845	0	0	0
Story1	B11	11	Live	LinStatic	1	-0.215	-0.09845	0	0	0
Story1	B11	11	EQX	LinStatic	0	3	11	0	0	0
Story1	B11	11	EQX	LinStatic	1	3	11	0	0	0
Story1	B11	11	EQY	LinStatic	0	-0.1412	-1	0	0	0
Story1	B11	11	EQY	LinStatic	1	-0.1412	-1	0	0	0
Story1	B11	11	Dead	Combination	0	-6	-0.05715	0	0	0
Story1	B11	11	Dead	Combination	1	-6	-0.05715	0	0	0
Story1	B12	12	Self Weight	LinStatic	0	-6	-0.115	0	0	0
Story1	B12	12	Self Weight	LinStatic	1	-6	-0.115	0	0	0
Story1	B12	12	Super Dead	LinStatic	0	-0.1412	-0.0687	0	0	0
Story1	B12	12	Super Dead	LinStatic	1	-0.1412	-0.0687	0	0	0
Story1	B12	12	Live	LinStatic	0	-0.2248	-0.09703	0	0	0
Story1	B12	12	Live	LinStatic	1	-0.2248	-0.09703	0	0	0
Story1	B12	12	EQX	LinStatic	0	4	10	0	0	0
Story1	B12	12	EQX	LinStatic	1	4	10	0	0	0
Story1	B12	12	EQY	LinStatic	0	-0.1974	-1	0	0	0
Story1	B12	12	EQY	LinStatic	1	-0.1974	-1	0	0	0
Story1	B12	12	Dead	Combination	0	-6	-0.1837	0	0	0
Story1	B12	12	Dead	Combination	1	-6	-0.1837	0	0	0
Story1	B13	13	Self Weight	LinStatic	0	0.2078	0.01928	0	0	0
Story1	B13	13	Self Weight	LinStatic	1	0.2078	0.01928	0	0	0
Story1	B13	13	Super Dead	LinStatic	0	0.007821	-0.09625	0	0	0
Story1	B13	13	Super Dead	LinStatic	1	0.007821	-0.09625	0	0	0
Story1	B13	13	Live	LinStatic	0	0.01198	-0.1351	0	0	0
Story1	B13	13	Live	LinStatic	1	0.01198	-0.1351	0	0	0
Story1	B13	13	EQX	LinStatic	0	-1	15	0	0	0
Story1	B13	13	EQX	LinStatic	1	-1	15	0	0	0
Story1	B13	13	EQY	LinStatic	0	0.02721	-1	0	0	0
Story1	B13	13	EQY	LinStatic	1	0.02721	-1	0	0	0
Story1	B13	13	Dead	Combination	0	0.2156	-0.07697	0	0	0
Story1	B13	13	Dead	Combination	1	0.2156	-0.07697	0	0	0
Story1	B14	14	Self Weight	LinStatic	0	-6	0.01036	0	0	0
Story1	B14	14	Self Weight	LinStatic	1	-6	0.01036	0	0	0
Story1	B14	14	Super Dead	LinStatic	0	-0.1182	-0.09024	0	0	0
Story1	B14	14	Super Dead	LinStatic	1	-0.1182	-0.09024	0	0	0
Story1	B14	14	Live	LinStatic	0	-0.1929	-0.1267	0	0	0
Story1	B14	14	Live	LinStatic	1	-0.1929	-0.1267	0	0	0
Story1	B14	14	EQX	LinStatic	0	-0.003731	14	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B14	14	EQX	LinStatic	1	-0.003731	14	0	0	0
Story1	B14	14	EQY	LinStatic	0	0.0001945	-1	0	0	0
Story1	B14	14	EQY	LinStatic	1	0.0001945	-1	0	0	0
Story1	B14	14	Dead	Combination	0	-6	-0.07988	0	0	0
Story1	B14	14	Dead	Combination	1	-6	-0.07988	0	0	0
Story1	B15	15	Self Weight	LinStatic	0	-6	-0.2357	0	0	0
Story1	B15	15	Self Weight	LinStatic	1	-6	-0.2357	0	0	0
Story1	B15	15	Super Dead	LinStatic	0	-0.1252	-0.09017	0	0	0
Story1	B15	15	Super Dead	LinStatic	1	-0.1252	-0.09017	0	0	0
Story1	B15	15	Live	LinStatic	0	-0.2029	-0.1278	0	0	0
Story1	B15	15	Live	LinStatic	1	-0.2029	-0.1278	0	0	0
Story1	B15	15	EQX	LinStatic	0	1	13	0	0	0
Story1	B15	15	EQX	LinStatic	1	1	13	0	0	0
Story1	B15	15	EQY	LinStatic	0	-0.04705	-1	0	0	0
Story1	B15	15	EQY	LinStatic	1	-0.04705	-1	0	0	0
Story1	B15	15	Dead	Combination	0	-6	-0.3259	0	0	0
Story1	B15	15	Dead	Combination	1	-6	-0.3259	0	0	0
Story1	B16	16	Self Weight	LinStatic	0	-0.1312	-0.2973	0	0	0
Story1	B16	16	Self Weight	LinStatic	1	-0.1312	-0.2973	0	0	0
Story1	B16	16	Super Dead	LinStatic	0	0.01905	-0.08103	0	0	0
Story1	B16	16	Super Dead	LinStatic	1	0.01905	-0.08103	0	0	0
Story1	B16	16	Live	LinStatic	0	0.02613	-0.1152	0	0	0
Story1	B16	16	Live	LinStatic	1	0.02613	-0.1152	0	0	0
Story1	B16	16	EQX	LinStatic	0	-3	11	0	0	0
Story1	B16	16	EQX	LinStatic	1	-3	11	0	0	0
Story1	B16	16	EQY	LinStatic	0	0.173	-1	0	0	0
Story1	B16	16	EQY	LinStatic	1	0.173	-1	0	0	0
Story1	B16	16	Dead	Combination	0	-0.1121	-0.3783	0	0	0
Story1	B16	16	Dead	Combination	1	-0.1121	-0.3783	0	0	0
Story1	B17	17	Self Weight	LinStatic	0	-6	-0.02909	0	0	0
Story1	B17	17	Self Weight	LinStatic	1	-6	-0.02909	0	0	0
Story1	B17	17	Super Dead	LinStatic	0	-0.1108	-0.07075	0	0	0
Story1	B17	17	Super Dead	LinStatic	1	-0.1108	-0.07075	0	0	0
Story1	B17	17	Live	LinStatic	0	-0.185	-0.09951	0	0	0
Story1	B17	17	Live	LinStatic	1	-0.185	-0.09951	0	0	0
Story1	B17	17	EQX	LinStatic	0	-3	11	0	0	0
Story1	B17	17	EQX	LinStatic	1	-3	11	0	0	0
Story1	B17	17	EQY	LinStatic	0	0.1449	-1	0	0	0
Story1	B17	17	EQY	LinStatic	1	0.1449	-1	0	0	0
Story1	B17	17	Dead	Combination	0	-6	-0.09985	0	0	0
Story1	B17	17	Dead	Combination	1	-6	-0.09985	0	0	0
Story1	B18	18	Self Weight	LinStatic	0	-6	-0.01834	0	0	0
Story1	B18	18	Self Weight	LinStatic	1	-6	-0.01834	0	0	0
Story1	B18	18	Super Dead	LinStatic	0	-0.1055	-0.06691	0	0	0
Story1	B18	18	Super Dead	LinStatic	1	-0.1055	-0.06691	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B18	18	Live	LinStatic	0	-0.1757	-0.09406	0	0	0
Story1	B18	18	Live	LinStatic	1	-0.1757	-0.09406	0	0	0
Story1	B18	18	EQX	LinStatic	0	-2	10	0	0	0
Story1	B18	18	EQX	LinStatic	1	-2	10	0	0	0
Story1	B18	18	EQY	LinStatic	0	0.1225	-1	0	0	0
Story1	B18	18	EQY	LinStatic	1	0.1225	-1	0	0	0
Story1	B18	18	Dead	Combination	0	-6	-0.08525	0	0	0
Story1	B18	18	Dead	Combination	1	-6	-0.08525	0	0	0
Story1	B4	73	Self Weight	LinStatic	0	2	-0.4314	0	0	0
Story1	B4	73	Self Weight	LinStatic	1	2	-0.4314	0	0	0
Story1	B4	73	Super Dead	LinStatic	0	0.1749	-0.08469	0	0	0
Story1	B4	73	Super Dead	LinStatic	1	0.1749	-0.08469	0	0	0
Story1	B4	73	Live	LinStatic	0	0.2529	-0.121	0	0	0
Story1	B4	73	Live	LinStatic	1	0.2529	-0.121	0	0	0
Story1	B4	73	EQX	LinStatic	0	0.1169	1	0	0	0
Story1	B4	73	EQX	LinStatic	1	0.1169	1	0	0	0
Story1	B4	73	EQY	LinStatic	0	1	7	0	0	0
Story1	B4	73	EQY	LinStatic	1	1	7	0	0	0
Story1	B4	73	Dead	Combination	0	2	-1	0	0	0
Story1	B4	73	Dead	Combination	1	2	-1	0	0	0
Story1	B8	74	Self Weight	LinStatic	0	-1	-2	0	0	0
Story1	B8	74	Self Weight	LinStatic	1	-1	-2	0	0	0
Story1	B8	74	Super Dead	LinStatic	0	-0.1032	-0.3117	0	0	0
Story1	B8	74	Super Dead	LinStatic	1	-0.1032	-0.3117	0	0	0
Story1	B8	74	Live	LinStatic	0	-0.1491	-0.4488	0	0	0
Story1	B8	74	Live	LinStatic	1	-0.1491	-0.4488	0	0	0
Story1	B8	74	EQX	LinStatic	0	0.06288	1	0	0	0
Story1	B8	74	EQX	LinStatic	1	0.06288	1	0	0	0
Story1	B8	74	EQY	LinStatic	0	0.433	9	0	0	0
Story1	B8	74	EQY	LinStatic	1	0.433	9	0	0	0
Story1	B8	74	Dead	Combination	0	-1	-3	0	0	0
Story1	B8	74	Dead	Combination	1	-1	-3	0	0	0
Story1	B9	75	Self Weight	LinStatic	0	-4	-5	0	0	0
Story1	B9	75	Self Weight	LinStatic	1	-4	-5	0	0	0
Story1	B9	75	Super Dead	LinStatic	0	-0.4425	-1	0	0	0
Story1	B9	75	Super Dead	LinStatic	1	-0.4425	-1	0	0	0
Story1	B9	75	Live	LinStatic	0	-1	-1	0	0	0
Story1	B9	75	Live	LinStatic	1	-1	-1	0	0	0
Story1	B9	75	EQX	LinStatic	0	1	2	0	0	0
Story1	B9	75	EQX	LinStatic	1	1	2	0	0	0
Story1	B9	75	EQY	LinStatic	0	5	11	0	0	0
Story1	B9	75	EQY	LinStatic	1	5	11	0	0	0
Story1	B9	75	Dead	Combination	0	-4	-5	0	0	0
Story1	B9	75	Dead	Combination	1	-4	-5	0	0	0
Story1	B19	76	Self Weight	LinStatic	0	0.3971	-0.05607	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B19	76	Self Weight	LinStatic	1	0.3971	-0.05607	0	0	0
Story1	B19	76	Super Dead	LinStatic	0	0.03996	-0.08876	0	0	0
Story1	B19	76	Super Dead	LinStatic	1	0.03996	-0.08876	0	0	0
Story1	B19	76	Live	LinStatic	0	0.05803	-0.1249	0	0	0
Story1	B19	76	Live	LinStatic	1	0.05803	-0.1249	0	0	0
Story1	B19	76	EQX	LinStatic	0	0.2184	3	0	0	0
Story1	B19	76	EQX	LinStatic	1	0.2184	3	0	0	0
Story1	B19	76	EQY	LinStatic	0	2	18	0	0	0
Story1	B19	76	EQY	LinStatic	1	2	18	0	0	0
Story1	B19	76	Dead	Combination	0	0.437	-0.1448	0	0	0
Story1	B19	76	Dead	Combination	1	0.437	-0.1448	0	0	0
Story1	B20	77	Self Weight	LinStatic	0	-6	-0.09564	0	0	0
Story1	B20	77	Self Weight	LinStatic	1	-6	-0.09564	0	0	0
Story1	B20	77	Super Dead	LinStatic	0	-1	-0.08968	0	0	0
Story1	B20	77	Super Dead	LinStatic	1	-1	-0.08968	0	0	0
Story1	B20	77	Live	LinStatic	0	-1	-0.1264	0	0	0
Story1	B20	77	Live	LinStatic	1	-1	-0.1264	0	0	0
Story1	B20	77	EQX	LinStatic	0	0.2822	2	0	0	0
Story1	B20	77	EQX	LinStatic	1	0.2822	2	0	0	0
Story1	B20	77	EQY	LinStatic	0	2	17	0	0	0
Story1	B20	77	EQY	LinStatic	1	2	17	0	0	0
Story1	B20	77	Dead	Combination	0	-6	-0.1853	0	0	0
Story1	B20	77	Dead	Combination	1	-6	-0.1853	0	0	0
Story1	B21	78	Self Weight	LinStatic	0	-5	-0.39	0	0	0
Story1	B21	78	Self Weight	LinStatic	1	-5	-0.39	0	0	0
Story1	B21	78	Super Dead	LinStatic	0	-1	-0.1213	0	0	0
Story1	B21	78	Super Dead	LinStatic	1	-1	-0.1213	0	0	0
Story1	B21	78	Live	LinStatic	0	-1	-0.1722	0	0	0
Story1	B21	78	Live	LinStatic	1	-1	-0.1722	0	0	0
Story1	B21	78	EQX	LinStatic	0	1	2	0	0	0
Story1	B21	78	EQX	LinStatic	1	1	2	0	0	0
Story1	B21	78	EQY	LinStatic	0	3	16	0	0	0
Story1	B21	78	EQY	LinStatic	1	3	16	0	0	0
Story1	B21	78	Dead	Combination	0	-6	-1	0	0	0
Story1	B21	78	Dead	Combination	1	-6	-1	0	0	0
Story1	B22	79	Self Weight	LinStatic	0	0.3638	1	0	0	0
Story1	B22	79	Self Weight	LinStatic	1	0.3638	1	0	0	0
Story1	B22	79	Super Dead	LinStatic	0	0.04547	-0.01067	0	0	0
Story1	B22	79	Super Dead	LinStatic	1	0.04547	-0.01067	0	0	0
Story1	B22	79	Live	LinStatic	0	0.06561	-0.01158	0	0	0
Story1	B22	79	Live	LinStatic	1	0.06561	-0.01158	0	0	0
Story1	B22	79	EQX	LinStatic	0	-0.07795	3	0	0	0
Story1	B22	79	EQX	LinStatic	1	-0.07795	3	0	0	0
Story1	B22	79	EQY	LinStatic	0	-1	20	0	0	0
Story1	B22	79	EQY	LinStatic	1	-1	20	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B22	79	Dead	Combination	0	0.4092	1	0	0	0
Story1	B22	79	Dead	Combination	1	0.4092	1	0	0	0
Story1	B23	80	Self Weight	LinStatic	0	-5	1	0	0	0
Story1	B23	80	Self Weight	LinStatic	1	-5	1	0	0	0
Story1	B23	80	Super Dead	LinStatic	0	-1	-0.009831	0	0	0
Story1	B23	80	Super Dead	LinStatic	1	-1	-0.009831	0	0	0
Story1	B23	80	Live	LinStatic	0	-1	-0.01051	0	0	0
Story1	B23	80	Live	LinStatic	1	-1	-0.01051	0	0	0
Story1	B23	80	EQX	LinStatic	0	0.02289	3	0	0	0
Story1	B23	80	EQX	LinStatic	1	0.02289	3	0	0	0
Story1	B23	80	EQY	LinStatic	0	0.1576	20	0	0	0
Story1	B23	80	EQY	LinStatic	1	0.1576	20	0	0	0
Story1	B23	80	Dead	Combination	0	-6	1	0	0	0
Story1	B23	80	Dead	Combination	1	-6	1	0	0	0
Story1	B24	81	Self Weight	LinStatic	0	-5	0.4288	0	0	0
Story1	B24	81	Self Weight	LinStatic	1	-5	0.4288	0	0	0
Story1	B24	81	Super Dead	LinStatic	0	-1	-0.03786	0	0	0
Story1	B24	81	Super Dead	LinStatic	1	-1	-0.03786	0	0	0
Story1	B24	81	Live	LinStatic	0	-1	-0.05112	0	0	0
Story1	B24	81	Live	LinStatic	1	-1	-0.05112	0	0	0
Story1	B24	81	EQX	LinStatic	0	0.2386	3	0	0	0
Story1	B24	81	EQX	LinStatic	1	0.2386	3	0	0	0
Story1	B24	81	EQY	LinStatic	0	2	19	0	0	0
Story1	B24	81	EQY	LinStatic	1	2	19	0	0	0
Story1	B24	81	Dead	Combination	0	-6	0.391	0	0	0
Story1	B24	81	Dead	Combination	1	-6	0.391	0	0	0
Story1	B25	83	Self Weight	LinStatic	0	0.1715	1	0	0	0
Story1	B25	83	Self Weight	LinStatic	1	0.1715	1	0	0	0
Story1	B25	83	Super Dead	LinStatic	0	0.02859	0.02319	0	0	0
Story1	B25	83	Super Dead	LinStatic	1	0.02859	0.02319	0	0	0
Story1	B25	83	Live	LinStatic	0	0.04098	0.03716	0	0	0
Story1	B25	83	Live	LinStatic	1	0.04098	0.03716	0	0	0
Story1	B25	83	EQX	LinStatic	0	-0.2609	3	0	0	0
Story1	B25	83	EQX	LinStatic	1	-0.2609	3	0	0	0
Story1	B25	83	EQY	LinStatic	0	-2	19	0	0	0
Story1	B25	83	EQY	LinStatic	1	-2	19	0	0	0
Story1	B25	83	Dead	Combination	0	0.2001	1	0	0	0
Story1	B25	83	Dead	Combination	1	0.2001	1	0	0	0
Story1	B26	84	Self Weight	LinStatic	0	-6	1	0	0	0
Story1	B26	84	Self Weight	LinStatic	1	-6	1	0	0	0
Story1	B26	84	Super Dead	LinStatic	0	-1	0.02312	0	0	0
Story1	B26	84	Super Dead	LinStatic	1	-1	0.02312	0	0	0
Story1	B26	84	Live	LinStatic	0	-1	0.0369	0	0	0
Story1	B26	84	Live	LinStatic	1	-1	0.0369	0	0	0
Story1	B26	84	EQX	LinStatic	0	-0.1307	3	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B26	84	EQX	LinStatic	1	-0.1307	3	0	0	0
Story1	B26	84	EQY	LinStatic	0	-1	19	0	0	0
Story1	B26	84	EQY	LinStatic	1	-1	19	0	0	0
Story1	B26	84	Dead	Combination	0	-6	1	0	0	0
Story1	B26	84	Dead	Combination	1	-6	1	0	0	0
Story1	B27	85	Self Weight	LinStatic	0	-6	1	0	0	0
Story1	B27	85	Self Weight	LinStatic	1	-6	1	0	0	0
Story1	B27	85	Super Dead	LinStatic	0	-1	-0.005068	0	0	0
Story1	B27	85	Super Dead	LinStatic	1	-1	-0.005068	0	0	0
Story1	B27	85	Live	LinStatic	0	-1	-0.003944	0	0	0
Story1	B27	85	Live	LinStatic	1	-1	-0.003944	0	0	0
Story1	B27	85	EQX	LinStatic	0	-0.02925	3	0	0	0
Story1	B27	85	EQX	LinStatic	1	-0.02925	3	0	0	0
Story1	B27	85	EQY	LinStatic	0	-0.2014	18	0	0	0
Story1	B27	85	EQY	LinStatic	1	-0.2014	18	0	0	0
Story1	B27	85	Dead	Combination	0	-6	1	0	0	0
Story1	B27	85	Dead	Combination	1	-6	1	0	0	0
Story1	B28	86	Self Weight	LinStatic	0	-0.02741	1	0	0	0
Story1	B28	86	Self Weight	LinStatic	1	-0.02741	1	0	0	0
Story1	B28	86	Super Dead	LinStatic	0	0.01717	0.02298	0	0	0
Story1	B28	86	Super Dead	LinStatic	1	0.01717	0.02298	0	0	0
Story1	B28	86	Live	LinStatic	0	0.02398	0.03576	0	0	0
Story1	B28	86	Live	LinStatic	1	0.02398	0.03576	0	0	0
Story1	B28	86	EQX	LinStatic	0	-1	2	0	0	0
Story1	B28	86	EQX	LinStatic	1	-1	2	0	0	0
Story1	B28	86	EQY	LinStatic	0	-4	14	0	0	0
Story1	B28	86	EQY	LinStatic	1	-4	14	0	0	0
Story1	B28	86	Dead	Combination	0	-0.01023	1	0	0	0
Story1	B28	86	Dead	Combination	1	-0.01023	1	0	0	0
Story1	B29	87	Self Weight	LinStatic	0	-6	1	0	0	0
Story1	B29	87	Self Weight	LinStatic	1	-6	1	0	0	0
Story1	B29	87	Super Dead	LinStatic	0	-1	0.02732	0	0	0
Story1	B29	87	Super Dead	LinStatic	1	-1	0.02732	0	0	0
Story1	B29	87	Live	LinStatic	0	-1	0.04193	0	0	0
Story1	B29	87	Live	LinStatic	1	-1	0.04193	0	0	0
Story1	B29	87	EQX	LinStatic	0	-1	2	0	0	0
Story1	B29	87	EQX	LinStatic	1	-1	2	0	0	0
Story1	B29	87	EQY	LinStatic	0	-4	13	0	0	0
Story1	B29	87	EQY	LinStatic	1	-4	13	0	0	0
Story1	B29	87	Dead	Combination	0	-7	1	0	0	0
Story1	B29	87	Dead	Combination	1	-7	1	0	0	0
Story1	B30	88	Self Weight	LinStatic	0	-6	1	0	0	0
Story1	B30	88	Self Weight	LinStatic	1	-6	1	0	0	0
Story1	B30	88	Super Dead	LinStatic	0	-1	0.003287	0	0	0
Story1	B30	88	Super Dead	LinStatic	1	-1	0.003287	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B30	88	Live	LinStatic	0	-1	0.007109	0	0	0
Story1	B30	88	Live	LinStatic	1	-1	0.007109	0	0	0
Story1	B30	88	EQX	LinStatic	0	-0.4757	2	0	0	0
Story1	B30	88	EQX	LinStatic	1	-0.4757	2	0	0	0
Story1	B30	88	EQY	LinStatic	0	-3	13	0	0	0
Story1	B30	88	EQY	LinStatic	1	-3	13	0	0	0
Story1	B30	88	Dead	Combination	0	-6	1	0	0	0
Story1	B30	88	Dead	Combination	1	-6	1	0	0	0
Story1	B43	43	Self Weight	LinStatic	0	0.02852	0.4974	0	0	0
Story1	B43	43	Self Weight	LinStatic	1	0.02852	0.4974	0	0	0
Story1	B43	43	Super Dead	LinStatic	0	0.01059	0.09542	0	0	0
Story1	B43	43	Super Dead	LinStatic	1	0.01059	0.09542	0	0	0
Story1	B43	43	Live	LinStatic	0	0.015	0.1364	0	0	0
Story1	B43	43	Live	LinStatic	1	0.015	0.1364	0	0	0
Story1	B43	43	EQX	LinStatic	0	-0.4494	-2	0	0	0
Story1	B43	43	EQX	LinStatic	1	-0.4494	-2	0	0	0
Story1	B43	43	EQY	LinStatic	0	3	13	0	0	0
Story1	B43	43	EQY	LinStatic	1	3	13	0	0	0
Story1	B43	43	Dead	Combination	0	0.03911	1	0	0	0
Story1	B43	43	Dead	Combination	1	0.03911	1	0	0	0
Story1	B44	44	Self Weight	LinStatic	0	-6	0.004769	0	0	0
Story1	B44	44	Self Weight	LinStatic	1	-6	0.004769	0	0	0
Story1	B44	44	Super Dead	LinStatic	0	-1	0.03553	0	0	0
Story1	B44	44	Super Dead	LinStatic	1	-1	0.03553	0	0	0
Story1	B44	44	Live	LinStatic	0	-1	0.04989	0	0	0
Story1	B44	44	Live	LinStatic	1	-1	0.04989	0	0	0
Story1	B44	44	EQX	LinStatic	0	-1	-2	0	0	0
Story1	B44	44	EQX	LinStatic	1	-1	-2	0	0	0
Story1	B44	44	EQY	LinStatic	0	3	13	0	0	0
Story1	B44	44	EQY	LinStatic	1	3	13	0	0	0
Story1	B44	44	Dead	Combination	0	-7	0.04029	0	0	0
Story1	B44	44	Dead	Combination	1	-7	0.04029	0	0	0
Story1	B45	45	Self Weight	LinStatic	0	-6	-1	0	0	0
Story1	B45	45	Self Weight	LinStatic	1	-6	-1	0	0	0
Story1	B45	45	Super Dead	LinStatic	0	-1	-0.05532	0	0	0
Story1	B45	45	Super Dead	LinStatic	1	-1	-0.05532	0	0	0
Story1	B45	45	Live	LinStatic	0	-1	-0.08132	0	0	0
Story1	B45	45	Live	LinStatic	1	-1	-0.08132	0	0	0
Story1	B45	45	EQX	LinStatic	0	-1	-2	0	0	0
Story1	B45	45	EQX	LinStatic	1	-1	-2	0	0	0
Story1	B45	45	EQY	LinStatic	0	5	12	0	0	0
Story1	B45	45	EQY	LinStatic	1	5	12	0	0	0
Story1	B45	45	Dead	Combination	0	-6	-1	0	0	0
Story1	B45	45	Dead	Combination	1	-6	-1	0	0	0
Story1	B46	46	Self Weight	LinStatic	0	0.1285	0.4747	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B46	46	Self Weight	LinStatic	1	0.1285	0.4747	0	0	0
Story1	B46	46	Super Dead	LinStatic	0	0.01523	0.1052	0	0	0
Story1	B46	46	Super Dead	LinStatic	1	0.01523	0.1052	0	0	0
Story1	B46	46	Live	LinStatic	0	0.02206	0.1501	0	0	0
Story1	B46	46	Live	LinStatic	1	0.02206	0.1501	0	0	0
Story1	B46	46	EQX	LinStatic	0	0.07793	-3	0	0	0
Story1	B46	46	EQX	LinStatic	1	0.07793	-3	0	0	0
Story1	B46	46	EQY	LinStatic	0	-0.4618	17	0	0	0
Story1	B46	46	EQY	LinStatic	1	-0.4618	17	0	0	0
Story1	B46	46	Dead	Combination	0	0.1437	1	0	0	0
Story1	B46	46	Dead	Combination	1	0.1437	1	0	0	0
Story1	B47	47	Self Weight	LinStatic	0	-6	0.4199	0	0	0
Story1	B47	47	Self Weight	LinStatic	1	-6	0.4199	0	0	0
Story1	B47	47	Super Dead	LinStatic	0	-1	0.09402	0	0	0
Story1	B47	47	Super Dead	LinStatic	1	-1	0.09402	0	0	0
Story1	B47	47	Live	LinStatic	0	-1	0.134	0	0	0
Story1	B47	47	Live	LinStatic	1	-1	0.134	0	0	0
Story1	B47	47	EQX	LinStatic	0	-0.01024	-3	0	0	0
Story1	B47	47	EQX	LinStatic	1	-0.01024	-3	0	0	0
Story1	B47	47	EQY	LinStatic	0	0.0607	16	0	0	0
Story1	B47	47	EQY	LinStatic	1	0.0607	16	0	0	0
Story1	B47	47	Dead	Combination	0	-7	1	0	0	0
Story1	B47	47	Dead	Combination	1	-7	1	0	0	0
Story1	B48	48	Self Weight	LinStatic	0	-6	0.1388	0	0	0
Story1	B48	48	Self Weight	LinStatic	1	-6	0.1388	0	0	0
Story1	B48	48	Super Dead	LinStatic	0	-1	0.05655	0	0	0
Story1	B48	48	Super Dead	LinStatic	1	-1	0.05655	0	0	0
Story1	B48	48	Live	LinStatic	0	-1	0.07996	0	0	0
Story1	B48	48	Live	LinStatic	1	-1	0.07996	0	0	0
Story1	B48	48	EQX	LinStatic	0	-0.1298	-3	0	0	0
Story1	B48	48	EQX	LinStatic	1	-0.1298	-3	0	0	0
Story1	B48	48	EQY	LinStatic	0	1	15	0	0	0
Story1	B48	48	EQY	LinStatic	1	1	15	0	0	0
Story1	B48	48	Dead	Combination	0	-7	0.1953	0	0	0
Story1	B48	48	Dead	Combination	1	-7	0.1953	0	0	0
Story1	B49	49	Self Weight	LinStatic	0	-1	-1	0	0	0
Story1	B49	49	Self Weight	LinStatic	1	-1	-1	0	0	0
Story1	B49	49	Super Dead	LinStatic	0	-0.1495	-0.03955	0	0	0
Story1	B49	49	Super Dead	LinStatic	1	-0.1495	-0.03955	0	0	0
Story1	B49	49	Live	LinStatic	0	-0.2156	-0.0587	0	0	0
Story1	B49	49	Live	LinStatic	1	-0.2156	-0.0587	0	0	0
Story1	B49	49	EQX	LinStatic	0	1	-2	0	0	0
Story1	B49	49	EQX	LinStatic	1	1	-2	0	0	0
Story1	B49	49	EQY	LinStatic	0	-5	13	0	0	0
Story1	B49	49	EQY	LinStatic	1	-5	13	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B49	49	Dead	Combination	0	-1	-1	0	0	0
Story1	B49	49	Dead	Combination	1	-1	-1	0	0	0
Story1	B50	50	Self Weight	LinStatic	0	-8	-0.4028	0	0	0
Story1	B50	50	Self Weight	LinStatic	1	-8	-0.4028	0	0	0
Story1	B50	50	Super Dead	LinStatic	0	-1	-0.01605	0	0	0
Story1	B50	50	Super Dead	LinStatic	1	-1	-0.01605	0	0	0
Story1	B50	50	Live	LinStatic	0	-1	-0.02464	0	0	0
Story1	B50	50	Live	LinStatic	1	-1	-0.02464	0	0	0
Story1	B50	50	EQX	LinStatic	0	1	-2	0	0	0
Story1	B50	50	EQX	LinStatic	1	1	-2	0	0	0
Story1	B50	50	EQY	LinStatic	0	-4	13	0	0	0
Story1	B50	50	EQY	LinStatic	1	-4	13	0	0	0
Story1	B50	50	Dead	Combination	0	-8	-0.4189	0	0	0
Story1	B50	50	Dead	Combination	1	-8	-0.4189	0	0	0
Story1	B51	51	Self Weight	LinStatic	0	-6	-1	0	0	0
Story1	B51	51	Self Weight	LinStatic	1	-6	-1	0	0	0
Story1	B51	51	Super Dead	LinStatic	0	-1	-0.03094	0	0	0
Story1	B51	51	Super Dead	LinStatic	1	-1	-0.03094	0	0	0
Story1	B51	51	Live	LinStatic	0	-1	-0.04609	0	0	0
Story1	B51	51	Live	LinStatic	1	-1	-0.04609	0	0	0
Story1	B51	51	EQX	LinStatic	0	0.3887	-2	0	0	0
Story1	B51	51	EQX	LinStatic	1	0.3887	-2	0	0	0
Story1	B51	51	EQY	LinStatic	0	-2	12	0	0	0
Story1	B51	51	EQY	LinStatic	1	-2	12	0	0	0
Story1	B51	51	Dead	Combination	0	-7	-1	0	0	0
Story1	B51	51	Dead	Combination	1	-7	-1	0	0	0
Story1	B52	52	Self Weight	LinStatic	0	-0.4854	1	0	0	0
Story1	B52	52	Self Weight	LinStatic	1	-0.4854	1	0	0	0
Story1	B52	52	Super Dead	LinStatic	0	-0.0758	0.2008	0	0	0
Story1	B52	52	Super Dead	LinStatic	1	-0.0758	0.2008	0	0	0
Story1	B52	52	Live	LinStatic	0	-0.1099	0.2888	0	0	0
Story1	B52	52	Live	LinStatic	1	-0.1099	0.2888	0	0	0
Story1	B52	52	EQX	LinStatic	0	-1	-2	0	0	0
Story1	B52	52	EQX	LinStatic	1	-1	-2	0	0	0
Story1	B52	52	EQY	LinStatic	0	4	12	0	0	0
Story1	B52	52	EQY	LinStatic	1	4	12	0	0	0
Story1	B52	52	Dead	Combination	0	-1	2	0	0	0
Story1	B52	52	Dead	Combination	1	-1	2	0	0	0
Story1	B53	53	Self Weight	LinStatic	0	-7	1	0	0	0
Story1	B53	53	Self Weight	LinStatic	1	-7	1	0	0	0
Story1	B53	53	Super Dead	LinStatic	0	-1	0.1256	0	0	0
Story1	B53	53	Super Dead	LinStatic	1	-1	0.1256	0	0	0
Story1	B53	53	Live	LinStatic	0	-1	0.1802	0	0	0
Story1	B53	53	Live	LinStatic	1	-1	0.1802	0	0	0
Story1	B53	53	EQX	LinStatic	0	-1	-2	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B53	53	EQX	LinStatic	1	-1	-2	0	0	0
Story1	B53	53	EQY	LinStatic	0	4	11	0	0	0
Story1	B53	53	EQY	LinStatic	1	4	11	0	0	0
Story1	B53	53	Dead	Combination	0	-8	1	0	0	0
Story1	B53	53	Dead	Combination	1	-8	1	0	0	0
Story1	B54	54	Self Weight	LinStatic	0	-6	0.004015	0	0	0
Story1	B54	54	Self Weight	LinStatic	1	-6	0.004015	0	0	0
Story1	B54	54	Super Dead	LinStatic	0	-1	0.02678	0	0	0
Story1	B54	54	Super Dead	LinStatic	1	-1	0.02678	0	0	0
Story1	B54	54	Live	LinStatic	0	-1	0.03749	0	0	0
Story1	B54	54	Live	LinStatic	1	-1	0.03749	0	0	0
Story1	B54	54	EQX	LinStatic	0	-1	-2	0	0	0
Story1	B54	54	EQX	LinStatic	1	-1	-2	0	0	0
Story1	B54	54	EQY	LinStatic	0	3	10	0	0	0
Story1	B54	54	EQY	LinStatic	1	3	10	0	0	0
Story1	B54	54	Dead	Combination	0	-7	0.03079	0	0	0
Story1	B54	54	Dead	Combination	1	-7	0.03079	0	0	0
Story1	B55	55	Self Weight	LinStatic	0	-5	-1	0	0	0
Story1	B55	55	Self Weight	LinStatic	1	-5	-1	0	0	0
Story1	B55	55	Super Dead	LinStatic	0	-1	-0.0383	0	0	0
Story1	B55	55	Super Dead	LinStatic	1	-1	-0.0383	0	0	0
Story1	B55	55	Live	LinStatic	0	-1	-0.05699	0	0	0
Story1	B55	55	Live	LinStatic	1	-1	-0.05699	0	0	0
Story1	B55	55	EQX	LinStatic	0	1	-2	0	0	0
Story1	B55	55	EQX	LinStatic	1	1	-2	0	0	0
Story1	B55	55	EQY	LinStatic	0	-6	14	0	0	0
Story1	B55	55	EQY	LinStatic	1	-6	14	0	0	0
Story1	B55	55	Dead	Combination	0	-6	-1	0	0	0
Story1	B55	55	Dead	Combination	1	-6	-1	0	0	0
Story1	B56	56	Self Weight	LinStatic	0	-15	-1	0	0	0
Story1	B56	56	Self Weight	LinStatic	1	-15	-1	0	0	0
Story1	B56	56	Super Dead	LinStatic	0	-2	-0.1378	0	0	0
Story1	B56	56	Super Dead	LinStatic	1	-2	-0.1378	0	0	0
Story1	B56	56	Live	LinStatic	0	-3	-0.2006	0	0	0
Story1	B56	56	Live	LinStatic	1	-3	-0.2006	0	0	0
Story1	B56	56	EQX	LinStatic	0	1	-2	0	0	0
Story1	B56	56	EQX	LinStatic	1	1	-2	0	0	0
Story1	B56	56	EQY	LinStatic	0	-6	13	0	0	0
Story1	B56	56	EQY	LinStatic	1	-6	13	0	0	0
Story1	B56	56	Dead	Combination	0	-17	-2	0	0	0
Story1	B56	56	Dead	Combination	1	-17	-2	0	0	0
Story1	B57	57	Self Weight	LinStatic	0	-9	-3	0	0	0
Story1	B57	57	Self Weight	LinStatic	1	-9	-3	0	0	0
Story1	B57	57	Super Dead	LinStatic	0	-1	-0.3145	0	0	0
Story1	B57	57	Super Dead	LinStatic	1	-1	-0.3145	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B57	57	Live	LinStatic	0	-1	-0.4558	0	0	0
Story1	B57	57	Live	LinStatic	1	-1	-0.4558	0	0	0
Story1	B57	57	EQX	LinStatic	0	0.1538	-2	0	0	0
Story1	B57	57	EQX	LinStatic	1	0.1538	-2	0	0	0
Story1	B57	57	EQY	LinStatic	0	-1	11	0	0	0
Story1	B57	57	EQY	LinStatic	1	-1	11	0	0	0
Story1	B57	57	Dead	Combination	0	-10	-3	0	0	0
Story1	B57	57	Dead	Combination	1	-10	-3	0	0	0
Story1	B58	31	Self Weight	LinStatic	0	1	-0.1774	0	0	0
Story1	B58	31	Self Weight	LinStatic	1	1	-0.1774	0	0	0
Story1	B58	31	Super Dead	LinStatic	0	0.01105	-0.00822	0	0	0
Story1	B58	31	Super Dead	LinStatic	1	0.01105	-0.00822	0	0	0
Story1	B58	31	Live	LinStatic	0	0.01827	-0.0124	0	0	0
Story1	B58	31	Live	LinStatic	1	0.01827	-0.0124	0	0	0
Story1	B58	31	EQX	LinStatic	0	1	6	0	0	0
Story1	B58	31	EQX	LinStatic	1	1	6	0	0	0
Story1	B58	31	EQY	LinStatic	0	0.0243	0.105	0	0	0
Story1	B58	31	EQY	LinStatic	1	0.0243	0.105	0	0	0
Story1	B58	31	Dead	Combination	0	1	-0.1856	0	0	0
Story1	B58	31	Dead	Combination	1	1	-0.1856	0	0	0
Story1	B59	32	Self Weight	LinStatic	0	-2	-1	0	0	0
Story1	B59	32	Self Weight	LinStatic	1	-2	-1	0	0	0
Story1	B59	32	Super Dead	LinStatic	0	-0.05226	-0.03235	0	0	0
Story1	B59	32	Super Dead	LinStatic	1	-0.05226	-0.03235	0	0	0
Story1	B59	32	Live	LinStatic	0	-0.08513	-0.05173	0	0	0
Story1	B59	32	Live	LinStatic	1	-0.08513	-0.05173	0	0	0
Story1	B59	32	EQX	LinStatic	0	1	6	0	0	0
Story1	B59	32	EQX	LinStatic	1	1	6	0	0	0
Story1	B59	32	EQY	LinStatic	0	0.01647	0.1094	0	0	0
Story1	B59	32	EQY	LinStatic	1	0.01647	0.1094	0	0	0
Story1	B59	32	Dead	Combination	0	-2	-1	0	0	0
Story1	B59	32	Dead	Combination	1	-2	-1	0	0	0
Story1	B60	33	Self Weight	LinStatic	0	-4	-3	0	0	0
Story1	B60	33	Self Weight	LinStatic	1	-4	-3	0	0	0
Story1	B60	33	Super Dead	LinStatic	0	-0.09204	-0.06298	0	0	0
Story1	B60	33	Super Dead	LinStatic	1	-0.09204	-0.06298	0	0	0
Story1	B60	33	Live	LinStatic	0	-0.1496	-0.1016	0	0	0
Story1	B60	33	Live	LinStatic	1	-0.1496	-0.1016	0	0	0
Story1	B60	33	EQX	LinStatic	0	3	6	0	0	0
Story1	B60	33	EQX	LinStatic	1	3	6	0	0	0
Story1	B60	33	EQY	LinStatic	0	0.05664	0.1162	0	0	0
Story1	B60	33	EQY	LinStatic	1	0.05664	0.1162	0	0	0
Story1	B60	33	Dead	Combination	0	-4	-3	0	0	0
Story1	B60	33	Dead	Combination	1	-4	-3	0	0	0
Story1	B61	34	Self Weight	LinStatic	0	0.2203	-1	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B61	34	Self Weight	LinStatic	1	0.2203	-1	0	0	0
Story1	B61	34	Super Dead	LinStatic	0	0.00418	-0.02235	0	0	0
Story1	B61	34	Super Dead	LinStatic	1	0.00418	-0.02235	0	0	0
Story1	B61	34	Live	LinStatic	0	0.00693	-0.03449	0	0	0
Story1	B61	34	Live	LinStatic	1	0.00693	-0.03449	0	0	0
Story1	B61	34	EQX	LinStatic	0	1	11	0	0	0
Story1	B61	34	EQX	LinStatic	1	1	11	0	0	0
Story1	B61	34	EQY	LinStatic	0	0.01112	0.2052	0	0	0
Story1	B61	34	EQY	LinStatic	1	0.01112	0.2052	0	0	0
Story1	B61	34	Dead	Combination	0	0.2245	-1	0	0	0
Story1	B61	34	Dead	Combination	1	0.2245	-1	0	0	0
Story1	B62	35	Self Weight	LinStatic	0	-6	-1	0	0	0
Story1	B62	35	Self Weight	LinStatic	1	-6	-1	0	0	0
Story1	B62	35	Super Dead	LinStatic	0	-0.1211	-0.02221	0	0	0
Story1	B62	35	Super Dead	LinStatic	1	-0.1211	-0.02221	0	0	0
Story1	B62	35	Live	LinStatic	0	-0.1974	-0.03435	0	0	0
Story1	B62	35	Live	LinStatic	1	-0.1974	-0.03435	0	0	0
Story1	B62	35	EQX	LinStatic	0	1	10	0	0	0
Story1	B62	35	EQX	LinStatic	1	1	10	0	0	0
Story1	B62	35	EQY	LinStatic	0	0.01657	0.1948	0	0	0
Story1	B62	35	EQY	LinStatic	1	0.01657	0.1948	0	0	0
Story1	B62	35	Dead	Combination	0	-6	-1	0	0	0
Story1	B62	35	Dead	Combination	1	-6	-1	0	0	0
Story1	B63	36	Self Weight	LinStatic	0	-6	-1	0	0	0
Story1	B63	36	Self Weight	LinStatic	1	-6	-1	0	0	0
Story1	B63	36	Super Dead	LinStatic	0	-0.118	-0.02743	0	0	0
Story1	B63	36	Super Dead	LinStatic	1	-0.118	-0.02743	0	0	0
Story1	B63	36	Live	LinStatic	0	-0.1922	-0.04295	0	0	0
Story1	B63	36	Live	LinStatic	1	-0.1922	-0.04295	0	0	0
Story1	B63	36	EQX	LinStatic	0	2	10	0	0	0
Story1	B63	36	EQX	LinStatic	1	2	10	0	0	0
Story1	B63	36	EQY	LinStatic	0	0.0338	0.1859	0	0	0
Story1	B63	36	EQY	LinStatic	1	0.0338	0.1859	0	0	0
Story1	B63	36	Dead	Combination	0	-6	-1	0	0	0
Story1	B63	36	Dead	Combination	1	-6	-1	0	0	0
Story1	B64	37	Self Weight	LinStatic	0	0.3095	-0.3946	0	0	0
Story1	B64	37	Self Weight	LinStatic	1	0.3095	-0.3946	0	0	0
Story1	B64	37	Super Dead	LinStatic	0	0.007168	-0.01762	0	0	0
Story1	B64	37	Super Dead	LinStatic	1	0.007168	-0.01762	0	0	0
Story1	B64	37	Live	LinStatic	0	0.01155	-0.02664	0	0	0
Story1	B64	37	Live	LinStatic	1	0.01155	-0.02664	0	0	0
Story1	B64	37	EQX	LinStatic	0	-1	12	0	0	0
Story1	B64	37	EQX	LinStatic	1	-1	12	0	0	0
Story1	B64	37	EQY	LinStatic	0	-0.01476	0.2178	0	0	0
Story1	B64	37	EQY	LinStatic	1	-0.01476	0.2178	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B64	37	Dead	Combination	0	0.3167	-0.4122	0	0	0
Story1	B64	37	Dead	Combination	1	0.3167	-0.4122	0	0	0
Story1	B65	38	Self Weight	LinStatic	0	-6	-0.3622	0	0	0
Story1	B65	38	Self Weight	LinStatic	1	-6	-0.3622	0	0	0
Story1	B65	38	Super Dead	LinStatic	0	-0.1164	-0.01643	0	0	0
Story1	B65	38	Super Dead	LinStatic	1	-0.1164	-0.01643	0	0	0
Story1	B65	38	Live	LinStatic	0	-0.19	-0.02482	0	0	0
Story1	B65	38	Live	LinStatic	1	-0.19	-0.02482	0	0	0
Story1	B65	38	EQX	LinStatic	0	-0.2958	11	0	0	0
Story1	B65	38	EQX	LinStatic	1	-0.2958	11	0	0	0
Story1	B65	38	EQY	LinStatic	0	-0.005541	0.206	0	0	0
Story1	B65	38	EQY	LinStatic	1	-0.005541	0.206	0	0	0
Story1	B65	38	Dead	Combination	0	-6	-0.3787	0	0	0
Story1	B65	38	Dead	Combination	1	-6	-0.3787	0	0	0
Story1	B66	39	Self Weight	LinStatic	0	-6	-1	0	0	0
Story1	B66	39	Self Weight	LinStatic	1	-6	-1	0	0	0
Story1	B66	39	Super Dead	LinStatic	0	-0.1174	-0.02051	0	0	0
Story1	B66	39	Super Dead	LinStatic	1	-0.1174	-0.02051	0	0	0
Story1	B66	39	Live	LinStatic	0	-0.1916	-0.03157	0	0	0
Story1	B66	39	Live	LinStatic	1	-0.1916	-0.03157	0	0	0
Story1	B66	39	EQX	LinStatic	0	0.209	11	0	0	0
Story1	B66	39	EQX	LinStatic	1	0.209	11	0	0	0
Story1	B66	39	EQY	LinStatic	0	0.003915	0.1967	0	0	0
Story1	B66	39	EQY	LinStatic	1	0.003915	0.1967	0	0	0
Story1	B66	39	Dead	Combination	0	-6	-1	0	0	0
Story1	B66	39	Dead	Combination	1	-6	-1	0	0	0
Story1	B67	40	Self Weight	LinStatic	0	0.2254	-0.2572	0	0	0
Story1	B67	40	Self Weight	LinStatic	1	0.2254	-0.2572	0	0	0
Story1	B67	40	Super Dead	LinStatic	0	0.007122	-0.01199	0	0	0
Story1	B67	40	Super Dead	LinStatic	1	0.007122	-0.01199	0	0	0
Story1	B67	40	Live	LinStatic	0	0.01108	-0.01807	0	0	0
Story1	B67	40	Live	LinStatic	1	0.01108	-0.01807	0	0	0
Story1	B67	40	EQX	LinStatic	0	-3	8	0	0	0
Story1	B67	40	EQX	LinStatic	1	-3	8	0	0	0
Story1	B67	40	EQY	LinStatic	0	-0.0554	0.1537	0	0	0
Story1	B67	40	EQY	LinStatic	1	-0.0554	0.1537	0	0	0
Story1	B67	40	Dead	Combination	0	0.2325	-0.2692	0	0	0
Story1	B67	40	Dead	Combination	1	0.2325	-0.2692	0	0	0
Story1	B68	41	Self Weight	LinStatic	0	-6	-0.1685	0	0	0
Story1	B68	41	Self Weight	LinStatic	1	-6	-0.1685	0	0	0
Story1	B68	41	Super Dead	LinStatic	0	-0.1175	-0.009925	0	0	0
Story1	B68	41	Super Dead	LinStatic	1	-0.1175	-0.009925	0	0	0
Story1	B68	41	Live	LinStatic	0	-0.1922	-0.01475	0	0	0
Story1	B68	41	Live	LinStatic	1	-0.1922	-0.01475	0	0	0
Story1	B68	41	EQX	LinStatic	0	-3	8	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B68	41	EQX	LinStatic	1	-3	8	0	0	0
Story1	B68	41	EQY	LinStatic	0	-0.05021	0.1494	0	0	0
Story1	B68	41	EQY	LinStatic	1	-0.05021	0.1494	0	0	0
Story1	B68	41	Dead	Combination	0	-6	-0.1785	0	0	0
Story1	B68	41	Dead	Combination	1	-6	-0.1785	0	0	0
Story1	B69	42	Self Weight	LinStatic	0	-6	-0.3283	0	0	0
Story1	B69	42	Self Weight	LinStatic	1	-6	-0.3283	0	0	0
Story1	B69	42	Super Dead	LinStatic	0	-0.1166	-0.01319	0	0	0
Story1	B69	42	Super Dead	LinStatic	1	-0.1166	-0.01319	0	0	0
Story1	B69	42	Live	LinStatic	0	-0.1906	-0.02011	0	0	0
Story1	B69	42	Live	LinStatic	1	-0.1906	-0.02011	0	0	0
Story1	B69	42	EQX	LinStatic	0	-2	8	0	0	0
Story1	B69	42	EQX	LinStatic	1	-2	8	0	0	0
Story1	B69	42	EQY	LinStatic	0	-0.03741	0.1469	0	0	0
Story1	B69	42	EQY	LinStatic	1	-0.03741	0.1469	0	0	0
Story1	B69	42	Dead	Combination	0	-6	-0.3415	0	0	0
Story1	B69	42	Dead	Combination	1	-6	-0.3415	0	0	0
Story1	B70	58	Self Weight	LinStatic	0	-0.1769	-0.03855	0	0	0
Story1	B70	58	Self Weight	LinStatic	1	-0.1769	-0.03855	0	0	0
Story1	B70	58	Super Dead	LinStatic	0	-0.005199	-0.00753	0	0	0
Story1	B70	58	Super Dead	LinStatic	1	-0.005199	-0.00753	0	0	0
Story1	B70	58	Live	LinStatic	0	-0.008152	-0.01076	0	0	0
Story1	B70	58	Live	LinStatic	1	-0.008152	-0.01076	0	0	0
Story1	B70	58	EQX	LinStatic	0	2	8	0	0	0
Story1	B70	58	EQX	LinStatic	1	2	8	0	0	0
Story1	B70	58	EQY	LinStatic	0	0.03434	0.1576	0	0	0
Story1	B70	58	EQY	LinStatic	1	0.03434	0.1576	0	0	0
Story1	B70	58	Dead	Combination	0	-0.1821	-0.04608	0	0	0
Story1	B70	58	Dead	Combination	1	-0.1821	-0.04608	0	0	0
Story1	B71	59	Self Weight	LinStatic	0	-6	-0.04728	0	0	0
Story1	B71	59	Self Weight	LinStatic	1	-6	-0.04728	0	0	0
Story1	B71	59	Super Dead	LinStatic	0	-0.1293	-0.007503	0	0	0
Story1	B71	59	Super Dead	LinStatic	1	-0.1293	-0.007503	0	0	0
Story1	B71	59	Live	LinStatic	0	-0.2107	-0.01076	0	0	0
Story1	B71	59	Live	LinStatic	1	-0.2107	-0.01076	0	0	0
Story1	B71	59	EQX	LinStatic	0	2	8	0	0	0
Story1	B71	59	EQX	LinStatic	1	2	8	0	0	0
Story1	B71	59	EQY	LinStatic	0	0.03374	0.1526	0	0	0
Story1	B71	59	EQY	LinStatic	1	0.03374	0.1526	0	0	0
Story1	B71	59	Dead	Combination	0	-6	-0.05478	0	0	0
Story1	B71	59	Dead	Combination	1	-6	-0.05478	0	0	0
Story1	B72	60	Self Weight	LinStatic	0	-6	-0.3023	0	0	0
Story1	B72	60	Self Weight	LinStatic	1	-6	-0.3023	0	0	0
Story1	B72	60	Super Dead	LinStatic	0	-0.1228	-0.01268	0	0	0
Story1	B72	60	Super Dead	LinStatic	1	-0.1228	-0.01268	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B72	60	Live	LinStatic	0	-0.1999	-0.01926	0	0	0
Story1	B72	60	Live	LinStatic	1	-0.1999	-0.01926	0	0	0
Story1	B72	60	EQX	LinStatic	0	3	8	0	0	0
Story1	B72	60	EQX	LinStatic	1	3	8	0	0	0
Story1	B72	60	EQY	LinStatic	0	0.05427	0.1478	0	0	0
Story1	B72	60	EQY	LinStatic	1	0.05427	0.1478	0	0	0
Story1	B72	60	Dead	Combination	0	-6	-0.3149	0	0	0
Story1	B72	60	Dead	Combination	1	-6	-0.3149	0	0	0
Story1	B73	61	Self Weight	LinStatic	0	-0.4907	-1	0	0	0
Story1	B73	61	Self Weight	LinStatic	1	-0.4907	-1	0	0	0
Story1	B73	61	Super Dead	LinStatic	0	-0.01102	-0.03487	0	0	0
Story1	B73	61	Super Dead	LinStatic	1	-0.01102	-0.03487	0	0	0
Story1	B73	61	Live	LinStatic	0	-0.01783	-0.05477	0	0	0
Story1	B73	61	Live	LinStatic	1	-0.01783	-0.05477	0	0	0
Story1	B73	61	EQX	LinStatic	0	1	12	0	0	0
Story1	B73	61	EQX	LinStatic	1	1	12	0	0	0
Story1	B73	61	EQY	LinStatic	0	0.01538	0.2194	0	0	0
Story1	B73	61	EQY	LinStatic	1	0.01538	0.2194	0	0	0
Story1	B73	61	Dead	Combination	0	-1	-1	0	0	0
Story1	B73	61	Dead	Combination	1	-1	-1	0	0	0
Story1	B74	62	Self Weight	LinStatic	0	-2	-1	0	0	0
Story1	B74	62	Self Weight	LinStatic	1	-2	-1	0	0	0
Story1	B74	62	Super Dead	LinStatic	0	-0.03719	-0.01953	0	0	0
Story1	B74	62	Super Dead	LinStatic	1	-0.03719	-0.01953	0	0	0
Story1	B74	62	Live	LinStatic	0	-0.06118	-0.03002	0	0	0
Story1	B74	62	Live	LinStatic	1	-0.06118	-0.03002	0	0	0
Story1	B74	62	EQX	LinStatic	0	-3	10	0	0	0
Story1	B74	62	EQX	LinStatic	1	-3	10	0	0	0
Story1	B74	62	EQY	LinStatic	0	-0.05142	0.1911	0	0	0
Story1	B74	62	EQY	LinStatic	1	-0.05142	0.1911	0	0	0
Story1	B74	62	Dead	Combination	0	-2	-1	0	0	0
Story1	B74	62	Dead	Combination	1	-2	-1	0	0	0
Story1	B75	63	Self Weight	LinStatic	0	-5	1	0	0	0
Story1	B75	63	Self Weight	LinStatic	1	-5	1	0	0	0
Story1	B75	63	Super Dead	LinStatic	0	-0.1092	0.01829	0	0	0
Story1	B75	63	Super Dead	LinStatic	1	-0.1092	0.01829	0	0	0
Story1	B75	63	Live	LinStatic	0	-0.1755	0.03207	0	0	0
Story1	B75	63	Live	LinStatic	1	-0.1755	0.03207	0	0	0
Story1	B75	63	EQX	LinStatic	0	15	12	0	0	0
Story1	B75	63	EQX	LinStatic	1	15	12	0	0	0
Story1	B75	63	EQY	LinStatic	0	0.2716	0.2304	0	0	0
Story1	B75	63	EQY	LinStatic	1	0.2716	0.2304	0	0	0
Story1	B75	63	Dead	Combination	0	-5	1	0	0	0
Story1	B75	63	Dead	Combination	1	-5	1	0	0	0
Story1	B76	64	Self Weight	LinStatic	0	2	1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B76	64	Self Weight	LinStatic	1	2	1	0	0	0
Story1	B76	64	Super Dead	LinStatic	0	0.03233	0.01741	0	0	0
Story1	B76	64	Super Dead	LinStatic	1	0.03233	0.01741	0	0	0
Story1	B76	64	Live	LinStatic	0	0.05265	0.03047	0	0	0
Story1	B76	64	Live	LinStatic	1	0.05265	0.03047	0	0	0
Story1	B76	64	EQX	LinStatic	0	-1	11	0	0	0
Story1	B76	64	EQX	LinStatic	1	-1	11	0	0	0
Story1	B76	64	EQY	LinStatic	0	-0.01196	0.2133	0	0	0
Story1	B76	64	EQY	LinStatic	1	-0.01196	0.2133	0	0	0
Story1	B76	64	Dead	Combination	0	2	1	0	0	0
Story1	B76	64	Dead	Combination	1	2	1	0	0	0
Story1	B77	65	Self Weight	LinStatic	0	0.102	0.4097	0	0	0
Story1	B77	65	Self Weight	LinStatic	1	0.102	0.4097	0	0	0
Story1	B77	65	Super Dead	LinStatic	0	0.000985	-0.0009536	0	0	0
Story1	B77	65	Super Dead	LinStatic	1	0.000985	-0.0009536	0	0	0
Story1	B77	65	Live	LinStatic	0	0.001873	0.0006297	0	0	0
Story1	B77	65	Live	LinStatic	1	0.001873	0.0006297	0	0	0
Story1	B77	65	EQX	LinStatic	0	1	12	0	0	0
Story1	B77	65	EQX	LinStatic	1	1	12	0	0	0
Story1	B77	65	EQY	LinStatic	0	0.02744	0.2255	0	0	0
Story1	B77	65	EQY	LinStatic	1	0.02744	0.2255	0	0	0
Story1	B77	65	Dead	Combination	0	0.103	0.4087	0	0	0
Story1	B77	65	Dead	Combination	1	0.103	0.4087	0	0	0
Story1	B78	66	Self Weight	LinStatic	0	-10	-1	0	0	0
Story1	B78	66	Self Weight	LinStatic	1	-10	-1	0	0	0
Story1	B78	66	Super Dead	LinStatic	0	-0.2003	-0.02563	0	0	0
Story1	B78	66	Super Dead	LinStatic	1	-0.2003	-0.02563	0	0	0
Story1	B78	66	Live	LinStatic	0	-0.328	-0.03939	0	0	0
Story1	B78	66	Live	LinStatic	1	-0.328	-0.03939	0	0	0
Story1	B78	66	EQX	LinStatic	0	-6	13	0	0	0
Story1	B78	66	EQX	LinStatic	1	-6	13	0	0	0
Story1	B78	66	EQY	LinStatic	0	-0.1117	0.2505	0	0	0
Story1	B78	66	EQY	LinStatic	1	-0.1117	0.2505	0	0	0
Story1	B78	66	Dead	Combination	0	-10	-1	0	0	0
Story1	B78	66	Dead	Combination	1	-10	-1	0	0	0
Story1	B79	67	Self Weight	LinStatic	0	-0.06033	1	0	0	0
Story1	B79	67	Self Weight	LinStatic	1	-0.06033	1	0	0	0
Story1	B79	67	Super Dead	LinStatic	0	-8.696E-05	0.00275	0	0	0
Story1	B79	67	Super Dead	LinStatic	1	-8.696E-05	0.00275	0	0	0
Story1	B79	67	Live	LinStatic	0	-0.000412	0.006558	0	0	0
Story1	B79	67	Live	LinStatic	1	-0.000412	0.006558	0	0	0
Story1	B79	67	EQX	LinStatic	0	-1	11	0	0	0
Story1	B79	67	EQX	LinStatic	1	-1	11	0	0	0
Story1	B79	67	EQY	LinStatic	0	-0.02786	0.2136	0	0	0
Story1	B79	67	EQY	LinStatic	1	-0.02786	0.2136	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B79	67	Dead	Combination	0	-0.06041	1	0	0	0
Story1	B79	67	Dead	Combination	1	-0.06041	1	0	0	0
Story1	B80	68	Self Weight	LinStatic	0	-6	1	0	0	0
Story1	B80	68	Self Weight	LinStatic	1	-6	1	0	0	0
Story1	B80	68	Super Dead	LinStatic	0	-0.1245	0.004507	0	0	0
Story1	B80	68	Super Dead	LinStatic	1	-0.1245	0.004507	0	0	0
Story1	B80	68	Live	LinStatic	0	-0.2033	0.009329	0	0	0
Story1	B80	68	Live	LinStatic	1	-0.2033	0.009329	0	0	0
Story1	B80	68	EQX	LinStatic	0	-1	11	0	0	0
Story1	B80	68	EQX	LinStatic	1	-1	11	0	0	0
Story1	B80	68	EQY	LinStatic	0	-0.0156	0.2036	0	0	0
Story1	B80	68	EQY	LinStatic	1	-0.0156	0.2036	0	0	0
Story1	B80	68	Dead	Combination	0	-6	1	0	0	0
Story1	B80	68	Dead	Combination	1	-6	1	0	0	0
Story1	B81	69	Self Weight	LinStatic	0	-5	0.4437	0	0	0
Story1	B81	69	Self Weight	LinStatic	1	-5	0.4437	0	0	0
Story1	B81	69	Super Dead	LinStatic	0	-0.1142	0.001008	0	0	0
Story1	B81	69	Super Dead	LinStatic	1	-0.1142	0.001008	0	0	0
Story1	B81	69	Live	LinStatic	0	-0.1865	0.003548	0	0	0
Story1	B81	69	Live	LinStatic	1	-0.1865	0.003548	0	0	0
Story1	B81	69	EQX	LinStatic	0	-1	10	0	0	0
Story1	B81	69	EQX	LinStatic	1	-1	10	0	0	0
Story1	B81	69	EQY	LinStatic	0	-0.009945	0.1963	0	0	0
Story1	B81	69	EQY	LinStatic	1	-0.009945	0.1963	0	0	0
Story1	B81	69	Dead	Combination	0	-6	0.4447	0	0	0
Story1	B81	69	Dead	Combination	1	-6	0.4447	0	0	0
Story1	B82	70	Self Weight	LinStatic	0	0.4164	0.0542	0	0	0
Story1	B82	70	Self Weight	LinStatic	1	0.4164	0.0542	0	0	0
Story1	B82	70	Super Dead	LinStatic	0	0.01024	-0.003417	0	0	0
Story1	B82	70	Super Dead	LinStatic	1	0.01024	-0.003417	0	0	0
Story1	B82	70	Live	LinStatic	0	0.01638	-0.004538	0	0	0
Story1	B82	70	Live	LinStatic	1	0.01638	-0.004538	0	0	0
Story1	B82	70	EQX	LinStatic	0	-2	6	0	0	0
Story1	B82	70	EQX	LinStatic	1	-2	6	0	0	0
Story1	B82	70	EQY	LinStatic	0	-0.03385	0.1071	0	0	0
Story1	B82	70	EQY	LinStatic	1	-0.03385	0.1071	0	0	0
Story1	B82	70	Dead	Combination	0	0.4266	0.05079	0	0	0
Story1	B82	70	Dead	Combination	1	0.4266	0.05079	0	0	0
Story1	B83	71	Self Weight	LinStatic	0	-2	1	0	0	0
Story1	B83	71	Self Weight	LinStatic	1	-2	1	0	0	0
Story1	B83	71	Super Dead	LinStatic	0	-0.05174	0.0216	0	0	0
Story1	B83	71	Super Dead	LinStatic	1	-0.05174	0.0216	0	0	0
Story1	B83	71	Live	LinStatic	0	-0.08461	0.03633	0	0	0
Story1	B83	71	Live	LinStatic	1	-0.08461	0.03633	0	0	0
Story1	B83	71	EQX	LinStatic	0	-1	6	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B83	71	EQX	LinStatic	1	-1	6	0	0	0
Story1	B83	71	EQY	LinStatic	0	-0.0185	0.1114	0	0	0
Story1	B83	71	EQY	LinStatic	1	-0.0185	0.1114	0	0	0
Story1	B83	71	Dead	Combination	0	-3	1	0	0	0
Story1	B83	71	Dead	Combination	1	-3	1	0	0	0
Story1	B84	72	Self Weight	LinStatic	0	-4	3	0	0	0
Story1	B84	72	Self Weight	LinStatic	1	-4	3	0	0	0
Story1	B84	72	Super Dead	LinStatic	0	-0.08393	0.04787	0	0	0
Story1	B84	72	Super Dead	LinStatic	1	-0.08393	0.04787	0	0	0
Story1	B84	72	Live	LinStatic	0	-0.1374	0.07929	0	0	0
Story1	B84	72	Live	LinStatic	1	-0.1374	0.07929	0	0	0
Story1	B84	72	EQX	LinStatic	0	-2	6	0	0	0
Story1	B84	72	EQX	LinStatic	1	-2	6	0	0	0
Story1	B84	72	EQY	LinStatic	0	-0.04579	0.1213	0	0	0
Story1	B84	72	EQY	LinStatic	1	-0.04579	0.1213	0	0	0
Story1	B84	72	Dead	Combination	0	-4	3	0	0	0
Story1	B84	72	Dead	Combination	1	-4	3	0	0	0
Story1	B31	4	Self Weight	LinStatic	0	0	-9	0	0	0
Story1	B31	4	Self Weight	LinStatic	1.8	0	-5	0	0	0
Story1	B31	4	Self Weight	LinStatic	3.6	0	-2	0	0	0
Story1	B31	4	Self Weight	LinStatic	5.4	0	2	0	0	0
Story1	B31	4	Self Weight	LinStatic	7.2	0	5	0	0	0
Story1	B31	4	Self Weight	LinStatic	9	0	9	0	0	0
Story1	B31	4	Self Weight	LinStatic	9	0	-1	0	0	0
Story1	B31	4	Self Weight	LinStatic	10	0	1	0	0	0
Story1	B31	4	Self Weight	LinStatic	10	0	-24	0	0	0
Story1	B31	4	Self Weight	LinStatic	11.9231	0	-20	0	0	0
Story1	B31	4	Self Weight	LinStatic	13.8462	0	-16	0	0	0
Story1	B31	4	Self Weight	LinStatic	15.7692	0	-13	0	0	0
Story1	B31	4	Self Weight	LinStatic	17.6923	0	-9	0	0	0
Story1	B31	4	Self Weight	LinStatic	19.6154	0	-5	0	0	0
Story1	B31	4	Self Weight	LinStatic	21.5385	0	-2	0	0	0
Story1	B31	4	Self Weight	LinStatic	23.4616	0	2	0	0	0
Story1	B31	4	Self Weight	LinStatic	25.3846	0	5	0	0	0
Story1	B31	4	Self Weight	LinStatic	27.3077	0	9	0	0	0
Story1	B31	4	Self Weight	LinStatic	29.2308	0	13	0	0	0
Story1	B31	4	Self Weight	LinStatic	31.1539	0	16	0	0	0
Story1	B31	4	Self Weight	LinStatic	33.0769	0	20	0	0	0
Story1	B31	4	Self Weight	LinStatic	35	0	24	0	0	0
Story1	B31	4	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B31	4	Super Dead	LinStatic	1.8	0	-1	0	0	0
Story1	B31	4	Super Dead	LinStatic	3.6	0	-0.2024	0	0	0
Story1	B31	4	Super Dead	LinStatic	5.4	0	0.2024	0	0	0
Story1	B31	4	Super Dead	LinStatic	7.2	0	1	0	0	0
Story1	B31	4	Super Dead	LinStatic	9	0	1	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B31	4	Super Dead	LinStatic	9	0	-0.1125	0	0	0
Story1	B31	4	Super Dead	LinStatic	10	0	0.1125	0	0	0
Story1	B31	4	Super Dead	LinStatic	10	0	-3	0	0	0
Story1	B31	4	Super Dead	LinStatic	11.9231	0	-2	0	0	0
Story1	B31	4	Super Dead	LinStatic	13.8462	0	-2	0	0	0
Story1	B31	4	Super Dead	LinStatic	15.7692	0	-2	0	0	0
Story1	B31	4	Super Dead	LinStatic	17.6923	0	-1	0	0	0
Story1	B31	4	Super Dead	LinStatic	19.6154	0	-1	0	0	0
Story1	B31	4	Super Dead	LinStatic	21.5385	0	-0.2163	0	0	0
Story1	B31	4	Super Dead	LinStatic	23.4616	0	0.2163	0	0	0
Story1	B31	4	Super Dead	LinStatic	25.3846	0	1	0	0	0
Story1	B31	4	Super Dead	LinStatic	27.3077	0	1	0	0	0
Story1	B31	4	Super Dead	LinStatic	29.2308	0	2	0	0	0
Story1	B31	4	Super Dead	LinStatic	31.1539	0	2	0	0	0
Story1	B31	4	Super Dead	LinStatic	33.0769	0	2	0	0	0
Story1	B31	4	Super Dead	LinStatic	35	0	3	0	0	0
Story1	B31	4	Live	LinStatic	0	0	-1	0	0	0
Story1	B31	4	Live	LinStatic	1.8	0	-1	0	0	0
Story1	B31	4	Live	LinStatic	3.6	0	-0.2925	0	0	0
Story1	B31	4	Live	LinStatic	5.4	0	0.2925	0	0	0
Story1	B31	4	Live	LinStatic	7.2	0	1	0	0	0
Story1	B31	4	Live	LinStatic	9	0	1	0	0	0
Story1	B31	4	Live	LinStatic	9	0	-0.1625	0	0	0
Story1	B31	4	Live	LinStatic	10	0	0.1625	0	0	0
Story1	B31	4	Live	LinStatic	10	0	-4	0	0	0
Story1	B31	4	Live	LinStatic	11.9231	0	-3	0	0	0
Story1	B31	4	Live	LinStatic	13.8462	0	-3	0	0	0
Story1	B31	4	Live	LinStatic	15.7692	0	-2	0	0	0
Story1	B31	4	Live	LinStatic	17.6923	0	-2	0	0	0
Story1	B31	4	Live	LinStatic	19.6154	0	-1	0	0	0
Story1	B31	4	Live	LinStatic	21.5385	0	-0.3125	0	0	0
Story1	B31	4	Live	LinStatic	23.4616	0	0.3125	0	0	0
Story1	B31	4	Live	LinStatic	25.3846	0	1	0	0	0
Story1	B31	4	Live	LinStatic	27.3077	0	2	0	0	0
Story1	B31	4	Live	LinStatic	29.2308	0	2	0	0	0
Story1	B31	4	Live	LinStatic	31.1539	0	3	0	0	0
Story1	B31	4	Live	LinStatic	33.0769	0	3	0	0	0
Story1	B31	4	Live	LinStatic	35	0	4	0	0	0
Story1	B31	4	EQX	LinStatic	0	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	1.8	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	3.6	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	5.4	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	7.2	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	9	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	9	0	0	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B31	4	EQX	LinStatic	10	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	10	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	11.9231	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	13.8462	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	15.7692	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	17.6923	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	19.6154	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	21.5385	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	23.4616	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	25.3846	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	27.3077	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	29.2308	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	31.1539	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	33.0769	0	0	0	0	0
Story1	B31	4	EQX	LinStatic	35	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	0	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	1.8	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	3.6	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	5.4	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	7.2	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	9	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	9	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	10	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	10	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	11.9231	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	13.8462	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	15.7692	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	17.6923	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	19.6154	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	21.5385	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	23.4616	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	25.3846	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	27.3077	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	29.2308	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	31.1539	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	33.0769	0	0	0	0	0
Story1	B31	4	EQY	LinStatic	35	0	0	0	0	0
Story1	B31	4	Dead	Combination	0	0	-10	0	0	0
Story1	B31	4	Dead	Combination	1.8	0	-6	0	0	0
Story1	B31	4	Dead	Combination	3.6	0	-2	0	0	0
Story1	B31	4	Dead	Combination	5.4	0	2	0	0	0
Story1	B31	4	Dead	Combination	7.2	0	6	0	0	0
Story1	B31	4	Dead	Combination	9	0	10	0	0	0
Story1	B31	4	Dead	Combination	9	0	-1	0	0	0
Story1	B31	4	Dead	Combination	10	0	1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B31	4	Dead	Combination	10	0	-27	0	0	0
Story1	B31	4	Dead	Combination	11.9231	0	-23	0	0	0
Story1	B31	4	Dead	Combination	13.8462	0	-18	0	0	0
Story1	B31	4	Dead	Combination	15.7692	0	-14	0	0	0
Story1	B31	4	Dead	Combination	17.6923	0	-10	0	0	0
Story1	B31	4	Dead	Combination	19.6154	0	-6	0	0	0
Story1	B31	4	Dead	Combination	21.5385	0	-2	0	0	0
Story1	B31	4	Dead	Combination	23.4616	0	2	0	0	0
Story1	B31	4	Dead	Combination	25.3846	0	6	0	0	0
Story1	B31	4	Dead	Combination	27.3077	0	10	0	0	0
Story1	B31	4	Dead	Combination	29.2308	0	14	0	0	0
Story1	B31	4	Dead	Combination	31.1539	0	18	0	0	0
Story1	B31	4	Dead	Combination	33.0769	0	23	0	0	0
Story1	B31	4	Dead	Combination	35	0	27	0	0	0
Story1	B32	8	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B32	8	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B32	8	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B32	8	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B32	8	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B32	8	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B32	8	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B32	8	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B32	8	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B32	8	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B32	8	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B32	8	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B32	8	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B32	8	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B32	8	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B32	8	Super Dead	LinStatic	1.9231	0	-2	0	0	0
Story1	B32	8	Super Dead	LinStatic	3.8462	0	-2	0	0	0
Story1	B32	8	Super Dead	LinStatic	5.7692	0	-2	0	0	0
Story1	B32	8	Super Dead	LinStatic	7.6923	0	-1	0	0	0
Story1	B32	8	Super Dead	LinStatic	9.6154	0	-1	0	0	0
Story1	B32	8	Super Dead	LinStatic	11.5385	0	-0.2163	0	0	0
Story1	B32	8	Super Dead	LinStatic	13.4615	0	0.2163	0	0	0
Story1	B32	8	Super Dead	LinStatic	15.3846	0	1	0	0	0
Story1	B32	8	Super Dead	LinStatic	17.3077	0	1	0	0	0
Story1	B32	8	Super Dead	LinStatic	19.2308	0	2	0	0	0
Story1	B32	8	Super Dead	LinStatic	21.1539	0	2	0	0	0
Story1	B32	8	Super Dead	LinStatic	23.0769	0	2	0	0	0
Story1	B32	8	Super Dead	LinStatic	25	0	3	0	0	0
Story1	B32	8	Live	LinStatic	0	0	-4	0	0	0
Story1	B32	8	Live	LinStatic	1.9231	0	-3	0	0	0
Story1	B32	8	Live	LinStatic	3.8462	0	-3	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B32	8	Live	LinStatic	5.7692	0	-2	0	0	0
Story1	B32	8	Live	LinStatic	7.6923	0	-2	0	0	0
Story1	B32	8	Live	LinStatic	9.6154	0	-1	0	0	0
Story1	B32	8	Live	LinStatic	11.5385	0	-0.3125	0	0	0
Story1	B32	8	Live	LinStatic	13.4615	0	0.3125	0	0	0
Story1	B32	8	Live	LinStatic	15.3846	0	1	0	0	0
Story1	B32	8	Live	LinStatic	17.3077	0	2	0	0	0
Story1	B32	8	Live	LinStatic	19.2308	0	2	0	0	0
Story1	B32	8	Live	LinStatic	21.1539	0	3	0	0	0
Story1	B32	8	Live	LinStatic	23.0769	0	3	0	0	0
Story1	B32	8	Live	LinStatic	25	0	4	0	0	0
Story1	B32	8	EQX	LinStatic	0	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B32	8	EQX	LinStatic	25	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	0	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B32	8	EQY	LinStatic	25	0	0	0	0	0
Story1	B32	8	Dead	Combination	0	0	-27	0	0	0
Story1	B32	8	Dead	Combination	1.9231	0	-23	0	0	0
Story1	B32	8	Dead	Combination	3.8462	0	-18	0	0	0
Story1	B32	8	Dead	Combination	5.7692	0	-14	0	0	0
Story1	B32	8	Dead	Combination	7.6923	0	-10	0	0	0
Story1	B32	8	Dead	Combination	9.6154	0	-6	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B32	8	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B32	8	Dead	Combination	13.4615	0	2	0	0	0
Story1	B32	8	Dead	Combination	15.3846	0	6	0	0	0
Story1	B32	8	Dead	Combination	17.3077	0	10	0	0	0
Story1	B32	8	Dead	Combination	19.2308	0	14	0	0	0
Story1	B32	8	Dead	Combination	21.1539	0	18	0	0	0
Story1	B32	8	Dead	Combination	23.0769	0	23	0	0	0
Story1	B32	8	Dead	Combination	25	0	27	0	0	0
Story1	B33	9	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B33	9	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B33	9	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B33	9	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B33	9	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B33	9	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B33	9	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B33	9	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B33	9	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B33	9	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B33	9	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B33	9	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B33	9	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B33	9	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B33	9	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B33	9	Super Dead	LinStatic	1.9231	0	-2	0	0	0
Story1	B33	9	Super Dead	LinStatic	3.8462	0	-2	0	0	0
Story1	B33	9	Super Dead	LinStatic	5.7692	0	-2	0	0	0
Story1	B33	9	Super Dead	LinStatic	7.6923	0	-1	0	0	0
Story1	B33	9	Super Dead	LinStatic	9.6154	0	-1	0	0	0
Story1	B33	9	Super Dead	LinStatic	11.5385	0	-0.2163	0	0	0
Story1	B33	9	Super Dead	LinStatic	13.4615	0	0.2163	0	0	0
Story1	B33	9	Super Dead	LinStatic	15.3846	0	1	0	0	0
Story1	B33	9	Super Dead	LinStatic	17.3077	0	1	0	0	0
Story1	B33	9	Super Dead	LinStatic	19.2308	0	2	0	0	0
Story1	B33	9	Super Dead	LinStatic	21.1539	0	2	0	0	0
Story1	B33	9	Super Dead	LinStatic	23.0769	0	2	0	0	0
Story1	B33	9	Super Dead	LinStatic	25	0	3	0	0	0
Story1	B33	9	Live	LinStatic	0	0	-4	0	0	0
Story1	B33	9	Live	LinStatic	1.9231	0	-3	0	0	0
Story1	B33	9	Live	LinStatic	3.8462	0	-3	0	0	0
Story1	B33	9	Live	LinStatic	5.7692	0	-2	0	0	0
Story1	B33	9	Live	LinStatic	7.6923	0	-2	0	0	0
Story1	B33	9	Live	LinStatic	9.6154	0	-1	0	0	0
Story1	B33	9	Live	LinStatic	11.5385	0	-0.3125	0	0	0
Story1	B33	9	Live	LinStatic	13.4615	0	0.3125	0	0	0
Story1	B33	9	Live	LinStatic	15.3846	0	1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B33	9	Live	LinStatic	17.3077	0	2	0	0	0
Story1	B33	9	Live	LinStatic	19.2308	0	2	0	0	0
Story1	B33	9	Live	LinStatic	21.1539	0	3	0	0	0
Story1	B33	9	Live	LinStatic	23.0769	0	3	0	0	0
Story1	B33	9	Live	LinStatic	25	0	4	0	0	0
Story1	B33	9	EQX	LinStatic	0	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B33	9	EQX	LinStatic	25	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	0	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B33	9	EQY	LinStatic	25	0	0	0	0	0
Story1	B33	9	Dead	Combination	0	0	-27	0	0	0
Story1	B33	9	Dead	Combination	1.9231	0	-23	0	0	0
Story1	B33	9	Dead	Combination	3.8462	0	-18	0	0	0
Story1	B33	9	Dead	Combination	5.7692	0	-14	0	0	0
Story1	B33	9	Dead	Combination	7.6923	0	-10	0	0	0
Story1	B33	9	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B33	9	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B33	9	Dead	Combination	13.4615	0	2	0	0	0
Story1	B33	9	Dead	Combination	15.3846	0	6	0	0	0
Story1	B33	9	Dead	Combination	17.3077	0	10	0	0	0
Story1	B33	9	Dead	Combination	19.2308	0	14	0	0	0
Story1	B33	9	Dead	Combination	21.1539	0	18	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B33	9	Dead	Combination	23.0769	0	23	0	0	0
Story1	B33	9	Dead	Combination	25	0	27	0	0	0
Story1	B34	19	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B34	19	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B34	19	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B34	19	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B34	19	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B34	19	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B34	19	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B34	19	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B34	19	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B34	19	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B34	19	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B34	19	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B34	19	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B34	19	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B34	19	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B34	19	Super Dead	LinStatic	1.9231	0	-2	0	0	0
Story1	B34	19	Super Dead	LinStatic	3.8462	0	-2	0	0	0
Story1	B34	19	Super Dead	LinStatic	5.7692	0	-2	0	0	0
Story1	B34	19	Super Dead	LinStatic	7.6923	0	-1	0	0	0
Story1	B34	19	Super Dead	LinStatic	9.6154	0	-1	0	0	0
Story1	B34	19	Super Dead	LinStatic	11.5385	0	-0.2163	0	0	0
Story1	B34	19	Super Dead	LinStatic	13.4615	0	0.2163	0	0	0
Story1	B34	19	Super Dead	LinStatic	15.3846	0	1	0	0	0
Story1	B34	19	Super Dead	LinStatic	17.3077	0	1	0	0	0
Story1	B34	19	Super Dead	LinStatic	19.2308	0	2	0	0	0
Story1	B34	19	Super Dead	LinStatic	21.1539	0	2	0	0	0
Story1	B34	19	Super Dead	LinStatic	23.0769	0	2	0	0	0
Story1	B34	19	Super Dead	LinStatic	25	0	3	0	0	0
Story1	B34	19	Live	LinStatic	0	0	-4	0	0	0
Story1	B34	19	Live	LinStatic	1.9231	0	-3	0	0	0
Story1	B34	19	Live	LinStatic	3.8462	0	-3	0	0	0
Story1	B34	19	Live	LinStatic	5.7692	0	-2	0	0	0
Story1	B34	19	Live	LinStatic	7.6923	0	-2	0	0	0
Story1	B34	19	Live	LinStatic	9.6154	0	-1	0	0	0
Story1	B34	19	Live	LinStatic	11.5385	0	-0.3125	0	0	0
Story1	B34	19	Live	LinStatic	13.4615	0	0.3125	0	0	0
Story1	B34	19	Live	LinStatic	15.3846	0	1	0	0	0
Story1	B34	19	Live	LinStatic	17.3077	0	2	0	0	0
Story1	B34	19	Live	LinStatic	19.2308	0	2	0	0	0
Story1	B34	19	Live	LinStatic	21.1539	0	3	0	0	0
Story1	B34	19	Live	LinStatic	23.0769	0	3	0	0	0
Story1	B34	19	Live	LinStatic	25	0	4	0	0	0
Story1	B34	19	EQX	LinStatic	0	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B34	19	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B34	19	EQX	LinStatic	25	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	0	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B34	19	EQY	LinStatic	25	0	0	0	0	0
Story1	B34	19	Dead	Combination	0	0	-27	0	0	0
Story1	B34	19	Dead	Combination	1.9231	0	-23	0	0	0
Story1	B34	19	Dead	Combination	3.8462	0	-18	0	0	0
Story1	B34	19	Dead	Combination	5.7692	0	-14	0	0	0
Story1	B34	19	Dead	Combination	7.6923	0	-10	0	0	0
Story1	B34	19	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B34	19	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B34	19	Dead	Combination	13.4615	0	2	0	0	0
Story1	B34	19	Dead	Combination	15.3846	0	6	0	0	0
Story1	B34	19	Dead	Combination	17.3077	0	10	0	0	0
Story1	B34	19	Dead	Combination	19.2308	0	14	0	0	0
Story1	B34	19	Dead	Combination	21.1539	0	18	0	0	0
Story1	B34	19	Dead	Combination	23.0769	0	23	0	0	0
Story1	B34	19	Dead	Combination	25	0	27	0	0	0
Story1	B35	20	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B35	20	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B35	20	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B35	20	Self Weight	LinStatic	5.7692	0	-13	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B35	20	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B35	20	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B35	20	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B35	20	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B35	20	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B35	20	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B35	20	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B35	20	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B35	20	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B35	20	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B35	20	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B35	20	Super Dead	LinStatic	1.9231	0	-2	0	0	0
Story1	B35	20	Super Dead	LinStatic	3.8462	0	-2	0	0	0
Story1	B35	20	Super Dead	LinStatic	5.7692	0	-2	0	0	0
Story1	B35	20	Super Dead	LinStatic	7.6923	0	-1	0	0	0
Story1	B35	20	Super Dead	LinStatic	9.6154	0	-1	0	0	0
Story1	B35	20	Super Dead	LinStatic	11.5385	0	-0.2162	0	0	0
Story1	B35	20	Super Dead	LinStatic	13.4615	0	0.2162	0	0	0
Story1	B35	20	Super Dead	LinStatic	15.3846	0	1	0	0	0
Story1	B35	20	Super Dead	LinStatic	17.3077	0	1	0	0	0
Story1	B35	20	Super Dead	LinStatic	19.2308	0	2	0	0	0
Story1	B35	20	Super Dead	LinStatic	21.1538	0	2	0	0	0
Story1	B35	20	Super Dead	LinStatic	23.0769	0	2	0	0	0
Story1	B35	20	Super Dead	LinStatic	25	0	3	0	0	0
Story1	B35	20	Live	LinStatic	0	0	-4	0	0	0
Story1	B35	20	Live	LinStatic	1.9231	0	-3	0	0	0
Story1	B35	20	Live	LinStatic	3.8462	0	-3	0	0	0
Story1	B35	20	Live	LinStatic	5.7692	0	-2	0	0	0
Story1	B35	20	Live	LinStatic	7.6923	0	-2	0	0	0
Story1	B35	20	Live	LinStatic	9.6154	0	-1	0	0	0
Story1	B35	20	Live	LinStatic	11.5385	0	-0.3125	0	0	0
Story1	B35	20	Live	LinStatic	13.4615	0	0.3125	0	0	0
Story1	B35	20	Live	LinStatic	15.3846	0	1	0	0	0
Story1	B35	20	Live	LinStatic	17.3077	0	2	0	0	0
Story1	B35	20	Live	LinStatic	19.2308	0	2	0	0	0
Story1	B35	20	Live	LinStatic	21.1538	0	3	0	0	0
Story1	B35	20	Live	LinStatic	23.0769	0	3	0	0	0
Story1	B35	20	Live	LinStatic	25	0	4	0	0	0
Story1	B35	20	EQX	LinStatic	0	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	11.5385	0	0	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B35	20	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B35	20	EQX	LinStatic	25	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	0	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B35	20	EQY	LinStatic	25	0	0	0	0	0
Story1	B35	20	Dead	Combination	0	0	-27	0	0	0
Story1	B35	20	Dead	Combination	1.9231	0	-23	0	0	0
Story1	B35	20	Dead	Combination	3.8462	0	-18	0	0	0
Story1	B35	20	Dead	Combination	5.7692	0	-14	0	0	0
Story1	B35	20	Dead	Combination	7.6923	0	-10	0	0	0
Story1	B35	20	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B35	20	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B35	20	Dead	Combination	13.4615	0	2	0	0	0
Story1	B35	20	Dead	Combination	15.3846	0	6	0	0	0
Story1	B35	20	Dead	Combination	17.3077	0	10	0	0	0
Story1	B35	20	Dead	Combination	19.2308	0	14	0	0	0
Story1	B35	20	Dead	Combination	21.1538	0	18	0	0	0
Story1	B35	20	Dead	Combination	23.0769	0	23	0	0	0
Story1	B35	20	Dead	Combination	25	0	27	0	0	0
Story1	B37	22	Self Weight	LinStatic	0	0	-23	0	0	0
Story1	B37	22	Self Weight	LinStatic	2	0	-19	0	0	0
Story1	B37	22	Self Weight	LinStatic	4	0	-15	0	0	0
Story1	B37	22	Self Weight	LinStatic	6	0	-11	0	0	0
Story1	B37	22	Self Weight	LinStatic	8	0	-8	0	0	0
Story1	B37	22	Self Weight	LinStatic	10	0	-4	0	0	0
Story1	B37	22	Self Weight	LinStatic	12	0	0	0	0	0
Story1	B37	22	Self Weight	LinStatic	14	0	4	0	0	0
Story1	B37	22	Self Weight	LinStatic	16	0	8	0	0	0
Story1	B37	22	Self Weight	LinStatic	18	0	11	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B37	22	Self Weight	LinStatic	20	0	15	0	0	0
Story1	B37	22	Self Weight	LinStatic	22	0	19	0	0	0
Story1	B37	22	Self Weight	LinStatic	24	0	23	0	0	0
Story1	B37	22	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B37	22	Super Dead	LinStatic	2	0	-2	0	0	0
Story1	B37	22	Super Dead	LinStatic	4	0	-2	0	0	0
Story1	B37	22	Super Dead	LinStatic	6	0	-1	0	0	0
Story1	B37	22	Super Dead	LinStatic	8	0	-1	0	0	0
Story1	B37	22	Super Dead	LinStatic	10	0	-0.4498	0	0	0
Story1	B37	22	Super Dead	LinStatic	12	0	0	0	0	0
Story1	B37	22	Super Dead	LinStatic	14	0	0.4498	0	0	0
Story1	B37	22	Super Dead	LinStatic	16	0	1	0	0	0
Story1	B37	22	Super Dead	LinStatic	18	0	1	0	0	0
Story1	B37	22	Super Dead	LinStatic	20	0	2	0	0	0
Story1	B37	22	Super Dead	LinStatic	22	0	2	0	0	0
Story1	B37	22	Super Dead	LinStatic	24	0	3	0	0	0
Story1	B37	22	Live	LinStatic	0	0	-4	0	0	0
Story1	B37	22	Live	LinStatic	2	0	-3	0	0	0
Story1	B37	22	Live	LinStatic	4	0	-3	0	0	0
Story1	B37	22	Live	LinStatic	6	0	-2	0	0	0
Story1	B37	22	Live	LinStatic	8	0	-1	0	0	0
Story1	B37	22	Live	LinStatic	10	0	-1	0	0	0
Story1	B37	22	Live	LinStatic	12	0	0	0	0	0
Story1	B37	22	Live	LinStatic	14	0	1	0	0	0
Story1	B37	22	Live	LinStatic	16	0	1	0	0	0
Story1	B37	22	Live	LinStatic	18	0	2	0	0	0
Story1	B37	22	Live	LinStatic	20	0	3	0	0	0
Story1	B37	22	Live	LinStatic	22	0	3	0	0	0
Story1	B37	22	Live	LinStatic	24	0	4	0	0	0
Story1	B37	22	EQX	LinStatic	0	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	2	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	4	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	6	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	8	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	10	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	12	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	14	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	16	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	18	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	20	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	22	0	0	0	0	0
Story1	B37	22	EQX	LinStatic	24	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	0	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	2	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	4	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B37	22	EQY	LinStatic	6	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	8	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	10	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	12	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	14	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	16	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	18	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	20	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	22	0	0	0	0	0
Story1	B37	22	EQY	LinStatic	24	0	0	0	0	0
Story1	B37	22	Dead	Combination	0	0	-26	0	0	0
Story1	B37	22	Dead	Combination	2	0	-21	0	0	0
Story1	B37	22	Dead	Combination	4	0	-17	0	0	0
Story1	B37	22	Dead	Combination	6	0	-13	0	0	0
Story1	B37	22	Dead	Combination	8	0	-9	0	0	0
Story1	B37	22	Dead	Combination	10	0	-4	0	0	0
Story1	B37	22	Dead	Combination	12	0	0	0	0	0
Story1	B37	22	Dead	Combination	14	0	4	0	0	0
Story1	B37	22	Dead	Combination	16	0	9	0	0	0
Story1	B37	22	Dead	Combination	18	0	13	0	0	0
Story1	B37	22	Dead	Combination	20	0	17	0	0	0
Story1	B37	22	Dead	Combination	22	0	21	0	0	0
Story1	B37	22	Dead	Combination	24	0	26	0	0	0
Story1	B38	23	Self Weight	LinStatic	0	0	-25	0	0	0
Story1	B38	23	Self Weight	LinStatic	2	0	-21	0	0	0
Story1	B38	23	Self Weight	LinStatic	4	0	-17	0	0	0
Story1	B38	23	Self Weight	LinStatic	6	0	-13	0	0	0
Story1	B38	23	Self Weight	LinStatic	8	0	-10	0	0	0
Story1	B38	23	Self Weight	LinStatic	10	0	-6	0	0	0
Story1	B38	23	Self Weight	LinStatic	12	0	-2	0	0	0
Story1	B38	23	Self Weight	LinStatic	14	0	2	0	0	0
Story1	B38	23	Self Weight	LinStatic	16	0	6	0	0	0
Story1	B38	23	Self Weight	LinStatic	18	0	10	0	0	0
Story1	B38	23	Self Weight	LinStatic	20	0	13	0	0	0
Story1	B38	23	Self Weight	LinStatic	22	0	17	0	0	0
Story1	B38	23	Self Weight	LinStatic	24	0	21	0	0	0
Story1	B38	23	Self Weight	LinStatic	26	0	25	0	0	0
Story1	B38	23	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B38	23	Super Dead	LinStatic	2	0	-2	0	0	0
Story1	B38	23	Super Dead	LinStatic	4	0	-2	0	0	0
Story1	B38	23	Super Dead	LinStatic	6	0	-2	0	0	0
Story1	B38	23	Super Dead	LinStatic	8	0	-1	0	0	0
Story1	B38	23	Super Dead	LinStatic	10	0	-1	0	0	0
Story1	B38	23	Super Dead	LinStatic	12	0	-0.2249	0	0	0
Story1	B38	23	Super Dead	LinStatic	14	0	0.2249	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B38	23	Super Dead	LinStatic	16	0	1	0	0	0
Story1	B38	23	Super Dead	LinStatic	18	0	1	0	0	0
Story1	B38	23	Super Dead	LinStatic	20	0	2	0	0	0
Story1	B38	23	Super Dead	LinStatic	22	0	2	0	0	0
Story1	B38	23	Super Dead	LinStatic	24	0	2	0	0	0
Story1	B38	23	Super Dead	LinStatic	26	0	3	0	0	0
Story1	B38	23	Live	LinStatic	0	0	-4	0	0	0
Story1	B38	23	Live	LinStatic	2	0	-4	0	0	0
Story1	B38	23	Live	LinStatic	4	0	-3	0	0	0
Story1	B38	23	Live	LinStatic	6	0	-2	0	0	0
Story1	B38	23	Live	LinStatic	8	0	-2	0	0	0
Story1	B38	23	Live	LinStatic	10	0	-1	0	0	0
Story1	B38	23	Live	LinStatic	12	0	-0.325	0	0	0
Story1	B38	23	Live	LinStatic	14	0	0.325	0	0	0
Story1	B38	23	Live	LinStatic	16	0	1	0	0	0
Story1	B38	23	Live	LinStatic	18	0	2	0	0	0
Story1	B38	23	Live	LinStatic	20	0	2	0	0	0
Story1	B38	23	Live	LinStatic	22	0	3	0	0	0
Story1	B38	23	Live	LinStatic	24	0	4	0	0	0
Story1	B38	23	Live	LinStatic	26	0	4	0	0	0
Story1	B38	23	EQX	LinStatic	0	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	2	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	4	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	6	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	8	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	10	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	12	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	14	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	16	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	18	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	20	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	22	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	24	0	0	0	0	0
Story1	B38	23	EQX	LinStatic	26	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	0	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	2	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	4	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	6	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	8	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	10	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	12	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	14	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	16	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	18	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	20	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B38	23	EQY	LinStatic	22	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	24	0	0	0	0	0
Story1	B38	23	EQY	LinStatic	26	0	0	0	0	0
Story1	B38	23	Dead	Combination	0	0	-28	0	0	0
Story1	B38	23	Dead	Combination	2	0	-23	0	0	0
Story1	B38	23	Dead	Combination	4	0	-19	0	0	0
Story1	B38	23	Dead	Combination	6	0	-15	0	0	0
Story1	B38	23	Dead	Combination	8	0	-11	0	0	0
Story1	B38	23	Dead	Combination	10	0	-6	0	0	0
Story1	B38	23	Dead	Combination	12	0	-2	0	0	0
Story1	B38	23	Dead	Combination	14	0	2	0	0	0
Story1	B38	23	Dead	Combination	16	0	6	0	0	0
Story1	B38	23	Dead	Combination	18	0	11	0	0	0
Story1	B38	23	Dead	Combination	20	0	15	0	0	0
Story1	B38	23	Dead	Combination	22	0	19	0	0	0
Story1	B38	23	Dead	Combination	24	0	23	0	0	0
Story1	B38	23	Dead	Combination	26	0	28	0	0	0
Story1	B39	24	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B39	24	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B39	24	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B39	24	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B39	24	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B39	24	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B39	24	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B39	24	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B39	24	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B39	24	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B39	24	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B39	24	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B39	24	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B39	24	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B39	24	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B39	24	Super Dead	LinStatic	1.9231	0	-2	0	0	0
Story1	B39	24	Super Dead	LinStatic	3.8462	0	-2	0	0	0
Story1	B39	24	Super Dead	LinStatic	5.7692	0	-2	0	0	0
Story1	B39	24	Super Dead	LinStatic	7.6923	0	-1	0	0	0
Story1	B39	24	Super Dead	LinStatic	9.6154	0	-1	0	0	0
Story1	B39	24	Super Dead	LinStatic	11.5385	0	-0.2163	0	0	0
Story1	B39	24	Super Dead	LinStatic	13.4615	0	0.2163	0	0	0
Story1	B39	24	Super Dead	LinStatic	15.3846	0	1	0	0	0
Story1	B39	24	Super Dead	LinStatic	17.3077	0	1	0	0	0
Story1	B39	24	Super Dead	LinStatic	19.2308	0	2	0	0	0
Story1	B39	24	Super Dead	LinStatic	21.1539	0	2	0	0	0
Story1	B39	24	Super Dead	LinStatic	23.0769	0	2	0	0	0
Story1	B39	24	Super Dead	LinStatic	25	0	3	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B39	24	Live	LinStatic	0	0	-4	0	0	0
Story1	B39	24	Live	LinStatic	1.9231	0	-3	0	0	0
Story1	B39	24	Live	LinStatic	3.8462	0	-3	0	0	0
Story1	B39	24	Live	LinStatic	5.7692	0	-2	0	0	0
Story1	B39	24	Live	LinStatic	7.6923	0	-2	0	0	0
Story1	B39	24	Live	LinStatic	9.6154	0	-1	0	0	0
Story1	B39	24	Live	LinStatic	11.5385	0	-0.3125	0	0	0
Story1	B39	24	Live	LinStatic	13.4615	0	0.3125	0	0	0
Story1	B39	24	Live	LinStatic	15.3846	0	1	0	0	0
Story1	B39	24	Live	LinStatic	17.3077	0	2	0	0	0
Story1	B39	24	Live	LinStatic	19.2308	0	2	0	0	0
Story1	B39	24	Live	LinStatic	21.1539	0	3	0	0	0
Story1	B39	24	Live	LinStatic	23.0769	0	3	0	0	0
Story1	B39	24	Live	LinStatic	25	0	4	0	0	0
Story1	B39	24	EQX	LinStatic	0	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B39	24	EQX	LinStatic	25	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	0	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B39	24	EQY	LinStatic	25	0	0	0	0	0
Story1	B39	24	Dead	Combination	0	0	-27	0	0	0
Story1	B39	24	Dead	Combination	1.9231	0	-23	0	0	0
Story1	B39	24	Dead	Combination	3.8462	0	-18	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B39	24	Dead	Combination	5.7692	0	-14	0	0	0
Story1	B39	24	Dead	Combination	7.6923	0	-10	0	0	0
Story1	B39	24	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B39	24	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B39	24	Dead	Combination	13.4615	0	2	0	0	0
Story1	B39	24	Dead	Combination	15.3846	0	6	0	0	0
Story1	B39	24	Dead	Combination	17.3077	0	10	0	0	0
Story1	B39	24	Dead	Combination	19.2308	0	14	0	0	0
Story1	B39	24	Dead	Combination	21.1539	0	18	0	0	0
Story1	B39	24	Dead	Combination	23.0769	0	23	0	0	0
Story1	B39	24	Dead	Combination	25	0	27	0	0	0
Story1	B40	25	Self Weight	LinStatic	0	0	-27	0	0	0
Story1	B40	25	Self Weight	LinStatic	2	0	-23	0	0	0
Story1	B40	25	Self Weight	LinStatic	4	0	-19	0	0	0
Story1	B40	25	Self Weight	LinStatic	6	0	-15	0	0	0
Story1	B40	25	Self Weight	LinStatic	8	0	-11	0	0	0
Story1	B40	25	Self Weight	LinStatic	10	0	-8	0	0	0
Story1	B40	25	Self Weight	LinStatic	12	0	-4	0	0	0
Story1	B40	25	Self Weight	LinStatic	14	0	0	0	0	0
Story1	B40	25	Self Weight	LinStatic	16	0	4	0	0	0
Story1	B40	25	Self Weight	LinStatic	18	0	8	0	0	0
Story1	B40	25	Self Weight	LinStatic	20	0	11	0	0	0
Story1	B40	25	Self Weight	LinStatic	22	0	15	0	0	0
Story1	B40	25	Self Weight	LinStatic	24	0	19	0	0	0
Story1	B40	25	Self Weight	LinStatic	26	0	23	0	0	0
Story1	B40	25	Self Weight	LinStatic	28	0	27	0	0	0
Story1	B40	25	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B40	25	Super Dead	LinStatic	2	0	-3	0	0	0
Story1	B40	25	Super Dead	LinStatic	4	0	-2	0	0	0
Story1	B40	25	Super Dead	LinStatic	6	0	-2	0	0	0
Story1	B40	25	Super Dead	LinStatic	8	0	-1	0	0	0
Story1	B40	25	Super Dead	LinStatic	10	0	-1	0	0	0
Story1	B40	25	Super Dead	LinStatic	12	0	-0.4498	0	0	0
Story1	B40	25	Super Dead	LinStatic	14	0	0	0	0	0
Story1	B40	25	Super Dead	LinStatic	16	0	0.4498	0	0	0
Story1	B40	25	Super Dead	LinStatic	18	0	1	0	0	0
Story1	B40	25	Super Dead	LinStatic	20	0	1	0	0	0
Story1	B40	25	Super Dead	LinStatic	22	0	2	0	0	0
Story1	B40	25	Super Dead	LinStatic	24	0	2	0	0	0
Story1	B40	25	Super Dead	LinStatic	26	0	3	0	0	0
Story1	B40	25	Super Dead	LinStatic	28	0	3	0	0	0
Story1	B40	25	Live	LinStatic	0	0	-5	0	0	0
Story1	B40	25	Live	LinStatic	2	0	-4	0	0	0
Story1	B40	25	Live	LinStatic	4	0	-3	0	0	0
Story1	B40	25	Live	LinStatic	6	0	-3	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B40	25	Live	LinStatic	8	0	-2	0	0	0
Story1	B40	25	Live	LinStatic	10	0	-1	0	0	0
Story1	B40	25	Live	LinStatic	12	0	-1	0	0	0
Story1	B40	25	Live	LinStatic	14	0	0	0	0	0
Story1	B40	25	Live	LinStatic	16	0	1	0	0	0
Story1	B40	25	Live	LinStatic	18	0	1	0	0	0
Story1	B40	25	Live	LinStatic	20	0	2	0	0	0
Story1	B40	25	Live	LinStatic	22	0	3	0	0	0
Story1	B40	25	Live	LinStatic	24	0	3	0	0	0
Story1	B40	25	Live	LinStatic	26	0	4	0	0	0
Story1	B40	25	Live	LinStatic	28	0	5	0	0	0
Story1	B40	25	EQX	LinStatic	0	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	2	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	4	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	6	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	8	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	10	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	12	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	14	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	16	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	18	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	20	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	22	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	24	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	26	0	0	0	0	0
Story1	B40	25	EQX	LinStatic	28	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	0	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	2	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	4	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	6	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	8	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	10	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	12	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	14	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	16	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	18	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	20	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	22	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	24	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	26	0	0	0	0	0
Story1	B40	25	EQY	LinStatic	28	0	0	0	0	0
Story1	B40	25	Dead	Combination	0	0	-30	0	0	0
Story1	B40	25	Dead	Combination	2	0	-26	0	0	0
Story1	B40	25	Dead	Combination	4	0	-21	0	0	0
Story1	B40	25	Dead	Combination	6	0	-17	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B40	25	Dead	Combination	8	0	-13	0	0	0
Story1	B40	25	Dead	Combination	10	0	-9	0	0	0
Story1	B40	25	Dead	Combination	12	0	-4	0	0	0
Story1	B40	25	Dead	Combination	14	0	0	0	0	0
Story1	B40	25	Dead	Combination	16	0	4	0	0	0
Story1	B40	25	Dead	Combination	18	0	9	0	0	0
Story1	B40	25	Dead	Combination	20	0	13	0	0	0
Story1	B40	25	Dead	Combination	22	0	17	0	0	0
Story1	B40	25	Dead	Combination	24	0	21	0	0	0
Story1	B40	25	Dead	Combination	26	0	26	0	0	0
Story1	B40	25	Dead	Combination	28	0	30	0	0	0
Story1	B41	26	Self Weight	LinStatic	0	0	-27	0	0	0
Story1	B41	26	Self Weight	LinStatic	2	0	-23	0	0	0
Story1	B41	26	Self Weight	LinStatic	4	0	-19	0	0	0
Story1	B41	26	Self Weight	LinStatic	6	0	-15	0	0	0
Story1	B41	26	Self Weight	LinStatic	8	0	-11	0	0	0
Story1	B41	26	Self Weight	LinStatic	10	0	-8	0	0	0
Story1	B41	26	Self Weight	LinStatic	12	0	-4	0	0	0
Story1	B41	26	Self Weight	LinStatic	14	0	0	0	0	0
Story1	B41	26	Self Weight	LinStatic	16	0	4	0	0	0
Story1	B41	26	Self Weight	LinStatic	18	0	8	0	0	0
Story1	B41	26	Self Weight	LinStatic	20	0	11	0	0	0
Story1	B41	26	Self Weight	LinStatic	22	0	15	0	0	0
Story1	B41	26	Self Weight	LinStatic	24	0	19	0	0	0
Story1	B41	26	Self Weight	LinStatic	26	0	23	0	0	0
Story1	B41	26	Self Weight	LinStatic	28	0	27	0	0	0
Story1	B41	26	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B41	26	Super Dead	LinStatic	2	0	-3	0	0	0
Story1	B41	26	Super Dead	LinStatic	4	0	-2	0	0	0
Story1	B41	26	Super Dead	LinStatic	6	0	-2	0	0	0
Story1	B41	26	Super Dead	LinStatic	8	0	-1	0	0	0
Story1	B41	26	Super Dead	LinStatic	10	0	-1	0	0	0
Story1	B41	26	Super Dead	LinStatic	12	0	-0.4498	0	0	0
Story1	B41	26	Super Dead	LinStatic	14	0	0	0	0	0
Story1	B41	26	Super Dead	LinStatic	16	0	0.4498	0	0	0
Story1	B41	26	Super Dead	LinStatic	18	0	1	0	0	0
Story1	B41	26	Super Dead	LinStatic	20	0	1	0	0	0
Story1	B41	26	Super Dead	LinStatic	22	0	2	0	0	0
Story1	B41	26	Super Dead	LinStatic	24	0	2	0	0	0
Story1	B41	26	Super Dead	LinStatic	26	0	3	0	0	0
Story1	B41	26	Super Dead	LinStatic	28	0	3	0	0	0
Story1	B41	26	Live	LinStatic	0	0	-5	0	0	0
Story1	B41	26	Live	LinStatic	2	0	-4	0	0	0
Story1	B41	26	Live	LinStatic	4	0	-3	0	0	0
Story1	B41	26	Live	LinStatic	6	0	-3	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B41	26	Live	LinStatic	8	0	-2	0	0	0
Story1	B41	26	Live	LinStatic	10	0	-1	0	0	0
Story1	B41	26	Live	LinStatic	12	0	-1	0	0	0
Story1	B41	26	Live	LinStatic	14	0	0	0	0	0
Story1	B41	26	Live	LinStatic	16	0	1	0	0	0
Story1	B41	26	Live	LinStatic	18	0	1	0	0	0
Story1	B41	26	Live	LinStatic	20	0	2	0	0	0
Story1	B41	26	Live	LinStatic	22	0	3	0	0	0
Story1	B41	26	Live	LinStatic	24	0	3	0	0	0
Story1	B41	26	Live	LinStatic	26	0	4	0	0	0
Story1	B41	26	Live	LinStatic	28	0	5	0	0	0
Story1	B41	26	EQX	LinStatic	0	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	2	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	4	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	6	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	8	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	10	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	12	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	14	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	16	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	18	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	20	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	22	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	24	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	26	0	0	0	0	0
Story1	B41	26	EQX	LinStatic	28	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	0	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	2	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	4	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	6	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	8	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	10	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	12	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	14	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	16	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	18	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	20	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	22	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	24	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	26	0	0	0	0	0
Story1	B41	26	EQY	LinStatic	28	0	0	0	0	0
Story1	B41	26	Dead	Combination	0	0	-30	0	0	0
Story1	B41	26	Dead	Combination	2	0	-26	0	0	0
Story1	B41	26	Dead	Combination	4	0	-21	0	0	0
Story1	B41	26	Dead	Combination	6	0	-17	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B41	26	Dead	Combination	8	0	-13	0	0	0
Story1	B41	26	Dead	Combination	10	0	-9	0	0	0
Story1	B41	26	Dead	Combination	12	0	-4	0	0	0
Story1	B41	26	Dead	Combination	14	0	0	0	0	0
Story1	B41	26	Dead	Combination	16	0	4	0	0	0
Story1	B41	26	Dead	Combination	18	0	9	0	0	0
Story1	B41	26	Dead	Combination	20	0	13	0	0	0
Story1	B41	26	Dead	Combination	22	0	17	0	0	0
Story1	B41	26	Dead	Combination	24	0	21	0	0	0
Story1	B41	26	Dead	Combination	26	0	26	0	0	0
Story1	B41	26	Dead	Combination	28	0	30	0	0	0
Story1	B42	27	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B42	27	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B42	27	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B42	27	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B42	27	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B42	27	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B42	27	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B42	27	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B42	27	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B42	27	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B42	27	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B42	27	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B42	27	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B42	27	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B42	27	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B42	27	Super Dead	LinStatic	1.9231	0	-2	0	0	0
Story1	B42	27	Super Dead	LinStatic	3.8462	0	-2	0	0	0
Story1	B42	27	Super Dead	LinStatic	5.7692	0	-2	0	0	0
Story1	B42	27	Super Dead	LinStatic	7.6923	0	-1	0	0	0
Story1	B42	27	Super Dead	LinStatic	9.6154	0	-1	0	0	0
Story1	B42	27	Super Dead	LinStatic	11.5385	0	-0.2162	0	0	0
Story1	B42	27	Super Dead	LinStatic	13.4615	0	0.2162	0	0	0
Story1	B42	27	Super Dead	LinStatic	15.3846	0	1	0	0	0
Story1	B42	27	Super Dead	LinStatic	17.3077	0	1	0	0	0
Story1	B42	27	Super Dead	LinStatic	19.2308	0	2	0	0	0
Story1	B42	27	Super Dead	LinStatic	21.1538	0	2	0	0	0
Story1	B42	27	Super Dead	LinStatic	23.0769	0	2	0	0	0
Story1	B42	27	Super Dead	LinStatic	25	0	3	0	0	0
Story1	B42	27	Live	LinStatic	0	0	-4	0	0	0
Story1	B42	27	Live	LinStatic	1.9231	0	-3	0	0	0
Story1	B42	27	Live	LinStatic	3.8462	0	-3	0	0	0
Story1	B42	27	Live	LinStatic	5.7692	0	-2	0	0	0
Story1	B42	27	Live	LinStatic	7.6923	0	-2	0	0	0
Story1	B42	27	Live	LinStatic	9.6154	0	-1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B42	27	Live	LinStatic	11.5385	0	-0.3125	0	0	0
Story1	B42	27	Live	LinStatic	13.4615	0	0.3125	0	0	0
Story1	B42	27	Live	LinStatic	15.3846	0	1	0	0	0
Story1	B42	27	Live	LinStatic	17.3077	0	2	0	0	0
Story1	B42	27	Live	LinStatic	19.2308	0	2	0	0	0
Story1	B42	27	Live	LinStatic	21.1538	0	3	0	0	0
Story1	B42	27	Live	LinStatic	23.0769	0	3	0	0	0
Story1	B42	27	Live	LinStatic	25	0	4	0	0	0
Story1	B42	27	EQX	LinStatic	0	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B42	27	EQX	LinStatic	25	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	0	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B42	27	EQY	LinStatic	25	0	0	0	0	0
Story1	B42	27	Dead	Combination	0	0	-27	0	0	0
Story1	B42	27	Dead	Combination	1.9231	0	-23	0	0	0
Story1	B42	27	Dead	Combination	3.8462	0	-18	0	0	0
Story1	B42	27	Dead	Combination	5.7692	0	-14	0	0	0
Story1	B42	27	Dead	Combination	7.6923	0	-10	0	0	0
Story1	B42	27	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B42	27	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B42	27	Dead	Combination	13.4615	0	2	0	0	0
Story1	B42	27	Dead	Combination	15.3846	0	6	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B42	27	Dead	Combination	17.3077	0	10	0	0	0
Story1	B42	27	Dead	Combination	19.2308	0	14	0	0	0
Story1	B42	27	Dead	Combination	21.1538	0	18	0	0	0
Story1	B42	27	Dead	Combination	23.0769	0	23	0	0	0
Story1	B42	27	Dead	Combination	25	0	27	0	0	0
Story1	B85	28	Self Weight	LinStatic	0	0	-38	0	0	0
Story1	B85	28	Self Weight	LinStatic	1.975	0	-34	0	0	0
Story1	B85	28	Self Weight	LinStatic	3.95	0	-30	0	0	0
Story1	B85	28	Self Weight	LinStatic	5.925	0	-26	0	0	0
Story1	B85	28	Self Weight	LinStatic	7.9	0	-23	0	0	0
Story1	B85	28	Self Weight	LinStatic	9.875	0	-19	0	0	0
Story1	B85	28	Self Weight	LinStatic	11.85	0	-15	0	0	0
Story1	B85	28	Self Weight	LinStatic	13.825	0	-11	0	0	0
Story1	B85	28	Self Weight	LinStatic	15.8	0	-8	0	0	0
Story1	B85	28	Self Weight	LinStatic	17.775	0	-4	0	0	0
Story1	B85	28	Self Weight	LinStatic	19.75	0	0	0	0	0
Story1	B85	28	Self Weight	LinStatic	21.725	0	4	0	0	0
Story1	B85	28	Self Weight	LinStatic	23.7	0	8	0	0	0
Story1	B85	28	Self Weight	LinStatic	25.675	0	11	0	0	0
Story1	B85	28	Self Weight	LinStatic	27.65	0	15	0	0	0
Story1	B85	28	Self Weight	LinStatic	29.625	0	19	0	0	0
Story1	B85	28	Self Weight	LinStatic	31.6	0	23	0	0	0
Story1	B85	28	Self Weight	LinStatic	33.575	0	26	0	0	0
Story1	B85	28	Self Weight	LinStatic	35.55	0	30	0	0	0
Story1	B85	28	Self Weight	LinStatic	37.525	0	34	0	0	0
Story1	B85	28	Self Weight	LinStatic	39.5	0	38	0	0	0
Story1	B85	28	Super Dead	LinStatic	0	0	-4	0	0	0
Story1	B85	28	Super Dead	LinStatic	1.975	0	-4	0	0	0
Story1	B85	28	Super Dead	LinStatic	3.95	0	-4	0	0	0
Story1	B85	28	Super Dead	LinStatic	5.925	0	-3	0	0	0
Story1	B85	28	Super Dead	LinStatic	7.9	0	-3	0	0	0
Story1	B85	28	Super Dead	LinStatic	9.875	0	-2	0	0	0
Story1	B85	28	Super Dead	LinStatic	11.85	0	-2	0	0	0
Story1	B85	28	Super Dead	LinStatic	13.825	0	-1	0	0	0
Story1	B85	28	Super Dead	LinStatic	15.8	0	-1	0	0	0
Story1	B85	28	Super Dead	LinStatic	17.775	0	-0.4442	0	0	0
Story1	B85	28	Super Dead	LinStatic	19.75	0	0	0	0	0
Story1	B85	28	Super Dead	LinStatic	21.725	0	0.4442	0	0	0
Story1	B85	28	Super Dead	LinStatic	23.7	0	1	0	0	0
Story1	B85	28	Super Dead	LinStatic	25.675	0	1	0	0	0
Story1	B85	28	Super Dead	LinStatic	27.65	0	2	0	0	0
Story1	B85	28	Super Dead	LinStatic	29.625	0	2	0	0	0
Story1	B85	28	Super Dead	LinStatic	31.6	0	3	0	0	0
Story1	B85	28	Super Dead	LinStatic	33.575	0	3	0	0	0
Story1	B85	28	Super Dead	LinStatic	35.55	0	4	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B85	28	Super Dead	LinStatic	37.525	0	4	0	0	0
Story1	B85	28	Super Dead	LinStatic	39.5	0	4	0	0	0
Story1	B85	28	Live	LinStatic	0	0	-6	0	0	0
Story1	B85	28	Live	LinStatic	1.975	0	-6	0	0	0
Story1	B85	28	Live	LinStatic	3.95	0	-5	0	0	0
Story1	B85	28	Live	LinStatic	5.925	0	-4	0	0	0
Story1	B85	28	Live	LinStatic	7.9	0	-4	0	0	0
Story1	B85	28	Live	LinStatic	9.875	0	-3	0	0	0
Story1	B85	28	Live	LinStatic	11.85	0	-3	0	0	0
Story1	B85	28	Live	LinStatic	13.825	0	-2	0	0	0
Story1	B85	28	Live	LinStatic	15.8	0	-1	0	0	0
Story1	B85	28	Live	LinStatic	17.775	0	-1	0	0	0
Story1	B85	28	Live	LinStatic	19.75	0	0	0	0	0
Story1	B85	28	Live	LinStatic	21.725	0	1	0	0	0
Story1	B85	28	Live	LinStatic	23.7	0	1	0	0	0
Story1	B85	28	Live	LinStatic	25.675	0	2	0	0	0
Story1	B85	28	Live	LinStatic	27.65	0	3	0	0	0
Story1	B85	28	Live	LinStatic	29.625	0	3	0	0	0
Story1	B85	28	Live	LinStatic	31.6	0	4	0	0	0
Story1	B85	28	Live	LinStatic	33.575	0	4	0	0	0
Story1	B85	28	Live	LinStatic	35.55	0	5	0	0	0
Story1	B85	28	Live	LinStatic	37.525	0	6	0	0	0
Story1	B85	28	Live	LinStatic	39.5	0	6	0	0	0
Story1	B85	28	EQX	LinStatic	0	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	1.975	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	3.95	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	5.925	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	7.9	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	9.875	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	11.85	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	13.825	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	15.8	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	17.775	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	19.75	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	21.725	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	23.7	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	25.675	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	27.65	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	29.625	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	31.6	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	33.575	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	35.55	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	37.525	0	0	0	0	0
Story1	B85	28	EQX	LinStatic	39.5	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	0	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B85	28	EQY	LinStatic	1.975	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	3.95	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	5.925	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	7.9	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	9.875	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	11.85	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	13.825	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	15.8	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	17.775	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	19.75	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	21.725	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	23.7	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	25.675	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	27.65	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	29.625	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	31.6	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	33.575	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	35.55	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	37.525	0	0	0	0	0
Story1	B85	28	EQY	LinStatic	39.5	0	0	0	0	0
Story1	B85	28	Dead	Combination	0	0	-42	0	0	0
Story1	B85	28	Dead	Combination	1.975	0	-38	0	0	0
Story1	B85	28	Dead	Combination	3.95	0	-34	0	0	0
Story1	B85	28	Dead	Combination	5.925	0	-29	0	0	0
Story1	B85	28	Dead	Combination	7.9	0	-25	0	0	0
Story1	B85	28	Dead	Combination	9.875	0	-21	0	0	0
Story1	B85	28	Dead	Combination	11.85	0	-17	0	0	0
Story1	B85	28	Dead	Combination	13.825	0	-13	0	0	0
Story1	B85	28	Dead	Combination	15.8	0	-8	0	0	0
Story1	B85	28	Dead	Combination	17.775	0	-4	0	0	0
Story1	B85	28	Dead	Combination	19.75	0	0	0	0	0
Story1	B85	28	Dead	Combination	21.725	0	4	0	0	0
Story1	B85	28	Dead	Combination	23.7	0	8	0	0	0
Story1	B85	28	Dead	Combination	25.675	0	13	0	0	0
Story1	B85	28	Dead	Combination	27.65	0	17	0	0	0
Story1	B85	28	Dead	Combination	29.625	0	21	0	0	0
Story1	B85	28	Dead	Combination	31.6	0	25	0	0	0
Story1	B85	28	Dead	Combination	33.575	0	29	0	0	0
Story1	B85	28	Dead	Combination	35.55	0	34	0	0	0
Story1	B85	28	Dead	Combination	37.525	0	38	0	0	0
Story1	B85	28	Dead	Combination	39.5	0	42	0	0	0
Story1	B86	29	Self Weight	LinStatic	0	0	-13	0	0	0
Story1	B86	29	Self Weight	LinStatic	1.9286	0	-9	0	0	0
Story1	B86	29	Self Weight	LinStatic	3.8571	0	-6	0	0	0
Story1	B86	29	Self Weight	LinStatic	5.7857	0	-2	0	0	0



**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B86	29	Self Weight	LinStatic	7.7143	0	2	0	0	0
Story1	B86	29	Self Weight	LinStatic	9.6429	0	6	0	0	0
Story1	B86	29	Self Weight	LinStatic	11.5714	0	9	0	0	0
Story1	B86	29	Self Weight	LinStatic	13.5	0	13	0	0	0
Story1	B86	29	Super Dead	LinStatic	0	0	-0.2714	0	0	0
Story1	B86	29	Super Dead	LinStatic	1.9286	0	-0.1938	0	0	0
Story1	B86	29	Super Dead	LinStatic	3.8571	0	-0.1163	0	0	0
Story1	B86	29	Super Dead	LinStatic	5.7857	0	-0.03876	0	0	0
Story1	B86	29	Super Dead	LinStatic	7.7143	0	0.03876	0	0	0
Story1	B86	29	Super Dead	LinStatic	9.6429	0	0.1163	0	0	0
Story1	B86	29	Super Dead	LinStatic	11.5714	0	0.1938	0	0	0
Story1	B86	29	Super Dead	LinStatic	13.5	0	0.2714	0	0	0
Story1	B86	29	Live	LinStatic	0	0	-0.4428	0	0	0
Story1	B86	29	Live	LinStatic	1.9286	0	-0.3163	0	0	0
Story1	B86	29	Live	LinStatic	3.8571	0	-0.1898	0	0	0
Story1	B86	29	Live	LinStatic	5.7857	0	-0.06326	0	0	0
Story1	B86	29	Live	LinStatic	7.7143	0	0.06326	0	0	0
Story1	B86	29	Live	LinStatic	9.6429	0	0.1898	0	0	0
Story1	B86	29	Live	LinStatic	11.5714	0	0.3163	0	0	0
Story1	B86	29	Live	LinStatic	13.5	0	0.4428	0	0	0
Story1	B86	29	EQX	LinStatic	0	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	1.9286	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	3.8571	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	5.7857	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	7.7143	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	9.6429	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	11.5714	0	0	0	0	0
Story1	B86	29	EQX	LinStatic	13.5	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	0	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	1.9286	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	3.8571	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	5.7857	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	7.7143	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	9.6429	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	11.5714	0	0	0	0	0
Story1	B86	29	EQY	LinStatic	13.5	0	0	0	0	0
Story1	B86	29	Dead	Combination	0	0	-13	0	0	0
Story1	B86	29	Dead	Combination	1.9286	0	-9	0	0	0
Story1	B86	29	Dead	Combination	3.8571	0	-6	0	0	0
Story1	B86	29	Dead	Combination	5.7857	0	-2	0	0	0
Story1	B86	29	Dead	Combination	7.7143	0	2	0	0	0
Story1	B86	29	Dead	Combination	9.6429	0	6	0	0	0
Story1	B86	29	Dead	Combination	11.5714	0	9	0	0	0
Story1	B86	29	Dead	Combination	13.5	0	13	0	0	0
Story1	B87	30	Self Weight	LinStatic	0	0	-24	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B87	30	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B87	30	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B87	30	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B87	30	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B87	30	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B87	30	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B87	30	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B87	30	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B87	30	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B87	30	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B87	30	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B87	30	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B87	30	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B87	30	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B87	30	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B87	30	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B87	30	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B87	30	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B87	30	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B87	30	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B87	30	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B87	30	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B87	30	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B87	30	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B87	30	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B87	30	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B87	30	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B87	30	Live	LinStatic	0	0	-1	0	0	0
Story1	B87	30	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B87	30	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B87	30	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B87	30	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B87	30	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B87	30	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B87	30	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B87	30	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B87	30	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B87	30	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B87	30	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B87	30	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B87	30	Live	LinStatic	25	0	1	0	0	0
Story1	B87	30	EQX	LinStatic	0	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	5.7692	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B87	30	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B87	30	EQX	LinStatic	25	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	0	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B87	30	EQY	LinStatic	25	0	0	0	0	0
Story1	B87	30	Dead	Combination	0	0	-24	0	0	0
Story1	B87	30	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B87	30	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B87	30	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B87	30	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B87	30	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B87	30	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B87	30	Dead	Combination	13.4615	0	2	0	0	0
Story1	B87	30	Dead	Combination	15.3846	0	6	0	0	0
Story1	B87	30	Dead	Combination	17.3077	0	9	0	0	0
Story1	B87	30	Dead	Combination	19.2308	0	13	0	0	0
Story1	B87	30	Dead	Combination	21.1538	0	17	0	0	0
Story1	B87	30	Dead	Combination	23.0769	0	21	0	0	0
Story1	B87	30	Dead	Combination	25	0	24	0	0	0
Story1	B88	82	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B88	82	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B88	82	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B88	82	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B88	82	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B88	82	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B88	82	Self Weight	LinStatic	11.5385	0	-2	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B88	82	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B88	82	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B88	82	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B88	82	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B88	82	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B88	82	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B88	82	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B88	82	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B88	82	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B88	82	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B88	82	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B88	82	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B88	82	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B88	82	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B88	82	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B88	82	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B88	82	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B88	82	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B88	82	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B88	82	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B88	82	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B88	82	Live	LinStatic	0	0	-1	0	0	0
Story1	B88	82	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B88	82	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B88	82	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B88	82	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B88	82	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B88	82	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B88	82	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B88	82	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B88	82	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B88	82	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B88	82	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B88	82	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B88	82	Live	LinStatic	25	0	1	0	0	0
Story1	B88	82	EQX	LinStatic	0	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	17.3077	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B88	82	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B88	82	EQX	LinStatic	25	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	0	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B88	82	EQY	LinStatic	25	0	0	0	0	0
Story1	B88	82	Dead	Combination	0	0	-24	0	0	0
Story1	B88	82	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B88	82	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B88	82	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B88	82	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B88	82	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B88	82	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B88	82	Dead	Combination	13.4615	0	2	0	0	0
Story1	B88	82	Dead	Combination	15.3846	0	6	0	0	0
Story1	B88	82	Dead	Combination	17.3077	0	9	0	0	0
Story1	B88	82	Dead	Combination	19.2308	0	13	0	0	0
Story1	B88	82	Dead	Combination	21.1538	0	17	0	0	0
Story1	B88	82	Dead	Combination	23.0769	0	21	0	0	0
Story1	B88	82	Dead	Combination	25	0	24	0	0	0
Story1	B89	89	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B89	89	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B89	89	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B89	89	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B89	89	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B89	89	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B89	89	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B89	89	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B89	89	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B89	89	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B89	89	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B89	89	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B89	89	Self Weight	LinStatic	23.0769	0	20	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B89	89	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B89	89	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B89	89	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B89	89	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B89	89	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B89	89	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B89	89	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B89	89	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B89	89	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B89	89	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B89	89	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B89	89	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B89	89	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B89	89	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B89	89	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B89	89	Live	LinStatic	0	0	-1	0	0	0
Story1	B89	89	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B89	89	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B89	89	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B89	89	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B89	89	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B89	89	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B89	89	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B89	89	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B89	89	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B89	89	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B89	89	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B89	89	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B89	89	Live	LinStatic	25	0	1	0	0	0
Story1	B89	89	EQX	LinStatic	0	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B89	89	EQX	LinStatic	25	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	0	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	1.9231	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B89	89	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B89	89	EQY	LinStatic	25	0	0	0	0	0
Story1	B89	89	Dead	Combination	0	0	-24	0	0	0
Story1	B89	89	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B89	89	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B89	89	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B89	89	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B89	89	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B89	89	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B89	89	Dead	Combination	13.4615	0	2	0	0	0
Story1	B89	89	Dead	Combination	15.3846	0	6	0	0	0
Story1	B89	89	Dead	Combination	17.3077	0	9	0	0	0
Story1	B89	89	Dead	Combination	19.2308	0	13	0	0	0
Story1	B89	89	Dead	Combination	21.1538	0	17	0	0	0
Story1	B89	89	Dead	Combination	23.0769	0	21	0	0	0
Story1	B89	89	Dead	Combination	25	0	24	0	0	0
Story1	B90	90	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B90	90	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B90	90	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B90	90	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B90	90	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B90	90	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B90	90	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B90	90	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B90	90	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B90	90	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B90	90	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B90	90	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B90	90	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B90	90	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B90	90	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B90	90	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B90	90	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B90	90	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B90	90	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B90	90	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B90	90	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B90	90	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B90	90	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B90	90	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B90	90	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B90	90	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B90	90	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B90	90	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B90	90	Live	LinStatic	0	0	-1	0	0	0
Story1	B90	90	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B90	90	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B90	90	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B90	90	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B90	90	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B90	90	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B90	90	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B90	90	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B90	90	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B90	90	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B90	90	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B90	90	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B90	90	Live	LinStatic	25	0	1	0	0	0
Story1	B90	90	EQX	LinStatic	0	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B90	90	EQX	LinStatic	25	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	0	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	13.4615	0	0	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B90	90	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B90	90	EQY	LinStatic	25	0	0	0	0	0
Story1	B90	90	Dead	Combination	0	0	-24	0	0	0
Story1	B90	90	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B90	90	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B90	90	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B90	90	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B90	90	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B90	90	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B90	90	Dead	Combination	13.4615	0	2	0	0	0
Story1	B90	90	Dead	Combination	15.3846	0	6	0	0	0
Story1	B90	90	Dead	Combination	17.3077	0	9	0	0	0
Story1	B90	90	Dead	Combination	19.2308	0	13	0	0	0
Story1	B90	90	Dead	Combination	21.1538	0	17	0	0	0
Story1	B90	90	Dead	Combination	23.0769	0	21	0	0	0
Story1	B90	90	Dead	Combination	25	0	24	0	0	0
Story1	B91	91	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B91	91	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B91	91	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B91	91	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B91	91	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B91	91	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B91	91	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B91	91	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B91	91	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B91	91	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B91	91	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B91	91	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B91	91	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B91	91	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B91	91	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B91	91	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B91	91	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B91	91	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B91	91	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B91	91	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B91	91	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B91	91	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B91	91	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B91	91	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B91	91	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B91	91	Super Dead	LinStatic	21.1539	0	0.3479	0	0	0
Story1	B91	91	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B91	91	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B91	91	Live	LinStatic	0	0	-1	0	0	0
Story1	B91	91	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B91	91	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B91	91	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B91	91	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B91	91	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B91	91	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B91	91	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B91	91	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B91	91	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B91	91	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B91	91	Live	LinStatic	21.1539	0	1	0	0	0
Story1	B91	91	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B91	91	Live	LinStatic	25	0	1	0	0	0
Story1	B91	91	EQX	LinStatic	0	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B91	91	EQX	LinStatic	25	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	0	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B91	91	EQY	LinStatic	25	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B91	91	Dead	Combination	0	0	-24	0	0	0
Story1	B91	91	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B91	91	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B91	91	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B91	91	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B91	91	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B91	91	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B91	91	Dead	Combination	13.4615	0	2	0	0	0
Story1	B91	91	Dead	Combination	15.3846	0	6	0	0	0
Story1	B91	91	Dead	Combination	17.3077	0	9	0	0	0
Story1	B91	91	Dead	Combination	19.2308	0	13	0	0	0
Story1	B91	91	Dead	Combination	21.1539	0	17	0	0	0
Story1	B91	91	Dead	Combination	23.0769	0	21	0	0	0
Story1	B91	91	Dead	Combination	25	0	24	0	0	0
Story1	B92	92	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B92	92	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B92	92	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B92	92	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B92	92	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B92	92	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B92	92	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B92	92	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B92	92	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B92	92	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B92	92	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B92	92	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B92	92	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B92	92	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B92	92	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B92	92	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B92	92	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B92	92	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B92	92	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B92	92	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B92	92	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B92	92	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B92	92	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B92	92	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B92	92	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B92	92	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B92	92	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B92	92	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B92	92	Live	LinStatic	0	0	-1	0	0	0
Story1	B92	92	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B92	92	Live	LinStatic	3.8462	0	-1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B92	92	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B92	92	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B92	92	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B92	92	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B92	92	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B92	92	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B92	92	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B92	92	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B92	92	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B92	92	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B92	92	Live	LinStatic	25	0	1	0	0	0
Story1	B92	92	EQX	LinStatic	0	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B92	92	EQX	LinStatic	25	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	0	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B92	92	EQY	LinStatic	25	0	0	0	0	0
Story1	B92	92	Dead	Combination	0	0	-24	0	0	0
Story1	B92	92	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B92	92	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B92	92	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B92	92	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B92	92	Dead	Combination	9.6154	0	-6	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B92	92	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B92	92	Dead	Combination	13.4615	0	2	0	0	0
Story1	B92	92	Dead	Combination	15.3846	0	6	0	0	0
Story1	B92	92	Dead	Combination	17.3077	0	9	0	0	0
Story1	B92	92	Dead	Combination	19.2308	0	13	0	0	0
Story1	B92	92	Dead	Combination	21.1538	0	17	0	0	0
Story1	B92	92	Dead	Combination	23.0769	0	21	0	0	0
Story1	B92	92	Dead	Combination	25	0	24	0	0	0
Story1	B93	93	Self Weight	LinStatic	0	0	-3	0	0	0
Story1	B93	93	Self Weight	LinStatic	1.75	0	0	0	0	0
Story1	B93	93	Self Weight	LinStatic	3.5	0	3	0	0	0
Story1	B93	93	Self Weight	LinStatic	3.5	0	-6	0	0	0
Story1	B93	93	Self Weight	LinStatic	5.125	0	-3	0	0	0
Story1	B93	93	Self Weight	LinStatic	6.75	0	0	0	0	0
Story1	B93	93	Self Weight	LinStatic	8.375	0	3	0	0	0
Story1	B93	93	Self Weight	LinStatic	10	0	6	0	0	0
Story1	B93	93	Self Weight	LinStatic	10	0	-14	0	0	0
Story1	B93	93	Self Weight	LinStatic	11.875	0	-11	0	0	0
Story1	B93	93	Self Weight	LinStatic	13.75	0	-7	0	0	0
Story1	B93	93	Self Weight	LinStatic	15.625	0	-4	0	0	0
Story1	B93	93	Self Weight	LinStatic	17.5	0	0	0	0	0
Story1	B93	93	Self Weight	LinStatic	19.375	0	4	0	0	0
Story1	B93	93	Self Weight	LinStatic	21.25	0	7	0	0	0
Story1	B93	93	Self Weight	LinStatic	23.125	0	11	0	0	0
Story1	B93	93	Self Weight	LinStatic	25	0	14	0	0	0
Story1	B93	93	Super Dead	LinStatic	0	0	-0.07035	0	0	0
Story1	B93	93	Super Dead	LinStatic	1.75	0	0	0	0	0
Story1	B93	93	Super Dead	LinStatic	3.5	0	0.07035	0	0	0
Story1	B93	93	Super Dead	LinStatic	3.5	0	-0.1307	0	0	0
Story1	B93	93	Super Dead	LinStatic	5.125	0	-0.06533	0	0	0
Story1	B93	93	Super Dead	LinStatic	6.75	0	0	0	0	0
Story1	B93	93	Super Dead	LinStatic	8.375	0	0.06533	0	0	0
Story1	B93	93	Super Dead	LinStatic	10	0	0.1307	0	0	0
Story1	B93	93	Super Dead	LinStatic	10	0	-0.3015	0	0	0
Story1	B93	93	Super Dead	LinStatic	11.875	0	-0.2261	0	0	0
Story1	B93	93	Super Dead	LinStatic	13.75	0	-0.1508	0	0	0
Story1	B93	93	Super Dead	LinStatic	15.625	0	-0.07538	0	0	0
Story1	B93	93	Super Dead	LinStatic	17.5	0	0	0	0	0
Story1	B93	93	Super Dead	LinStatic	19.375	0	0.07537	0	0	0
Story1	B93	93	Super Dead	LinStatic	21.25	0	0.1508	0	0	0
Story1	B93	93	Super Dead	LinStatic	23.125	0	0.2261	0	0	0
Story1	B93	93	Super Dead	LinStatic	25	0	0.3015	0	0	0
Story1	B93	93	Live	LinStatic	0	0	-0.1148	0	0	0
Story1	B93	93	Live	LinStatic	1.75	0	0	0	0	0
Story1	B93	93	Live	LinStatic	3.5	0	0.1148	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B93	93	Live	LinStatic	3.5	0	-0.2132	0	0	0
Story1	B93	93	Live	LinStatic	5.125	0	-0.1066	0	0	0
Story1	B93	93	Live	LinStatic	6.75	0	0	0	0	0
Story1	B93	93	Live	LinStatic	8.375	0	0.1066	0	0	0
Story1	B93	93	Live	LinStatic	10	0	0.2132	0	0	0
Story1	B93	93	Live	LinStatic	10	0	-0.492	0	0	0
Story1	B93	93	Live	LinStatic	11.875	0	-0.369	0	0	0
Story1	B93	93	Live	LinStatic	13.75	0	-0.246	0	0	0
Story1	B93	93	Live	LinStatic	15.625	0	-0.123	0	0	0
Story1	B93	93	Live	LinStatic	17.5	0	0	0	0	0
Story1	B93	93	Live	LinStatic	19.375	0	0.123	0	0	0
Story1	B93	93	Live	LinStatic	21.25	0	0.246	0	0	0
Story1	B93	93	Live	LinStatic	23.125	0	0.369	0	0	0
Story1	B93	93	Live	LinStatic	25	0	0.492	0	0	0
Story1	B93	93	EQX	LinStatic	0	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	1.75	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	3.5	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	3.5	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	5.125	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	6.75	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	8.375	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	10	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	10	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	11.875	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	13.75	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	15.625	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	17.5	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	19.375	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	21.25	0	0	0	0	0
Story1	B93	93	EQX	LinStatic	23.125	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	0	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	1.75	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	3.5	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	3.5	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	5.125	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	6.75	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	8.375	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	10	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	10	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	11.875	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	13.75	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	15.625	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	17.5	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	19.375	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B93	93	EQY	LinStatic	21.25	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	23.125	0	0	0	0	0
Story1	B93	93	EQY	LinStatic	25	0	0	0	0	0
Story1	B93	93	Dead	Combination	0	0	-3	0	0	0
Story1	B93	93	Dead	Combination	1.75	0	0	0	0	0
Story1	B93	93	Dead	Combination	3.5	0	3	0	0	0
Story1	B93	93	Dead	Combination	3.5	0	-6	0	0	0
Story1	B93	93	Dead	Combination	5.125	0	-3	0	0	0
Story1	B93	93	Dead	Combination	6.75	0	0	0	0	0
Story1	B93	93	Dead	Combination	8.375	0	3	0	0	0
Story1	B93	93	Dead	Combination	10	0	6	0	0	0
Story1	B93	93	Dead	Combination	10	0	-15	0	0	0
Story1	B93	93	Dead	Combination	11.875	0	-11	0	0	0
Story1	B93	93	Dead	Combination	13.75	0	-7	0	0	0
Story1	B93	93	Dead	Combination	15.625	0	-4	0	0	0
Story1	B93	93	Dead	Combination	17.5	0	0	0	0	0
Story1	B93	93	Dead	Combination	19.375	0	4	0	0	0
Story1	B93	93	Dead	Combination	21.25	0	7	0	0	0
Story1	B93	93	Dead	Combination	23.125	0	11	0	0	0
Story1	B93	93	Dead	Combination	25	0	15	0	0	0
Story1	B94	94	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B94	94	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B94	94	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B94	94	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B94	94	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B94	94	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B94	94	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B94	94	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B94	94	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B94	94	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B94	94	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B94	94	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B94	94	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B94	94	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B94	94	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B94	94	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B94	94	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B94	94	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B94	94	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B94	94	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B94	94	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B94	94	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B94	94	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B94	94	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B94	94	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B94	94	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B94	94	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B94	94	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B94	94	Live	LinStatic	0	0	-1	0	0	0
Story1	B94	94	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B94	94	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B94	94	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B94	94	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B94	94	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B94	94	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B94	94	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B94	94	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B94	94	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B94	94	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B94	94	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B94	94	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B94	94	Live	LinStatic	25	0	1	0	0	0
Story1	B94	94	EQX	LinStatic	0	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B94	94	EQX	LinStatic	25	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	0	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B94	94	EQY	LinStatic	25	0	0	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B94	94	Dead	Combination	0	0	-24	0	0	0
Story1	B94	94	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B94	94	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B94	94	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B94	94	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B94	94	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B94	94	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B94	94	Dead	Combination	13.4615	0	2	0	0	0
Story1	B94	94	Dead	Combination	15.3846	0	6	0	0	0
Story1	B94	94	Dead	Combination	17.3077	0	9	0	0	0
Story1	B94	94	Dead	Combination	19.2308	0	13	0	0	0
Story1	B94	94	Dead	Combination	21.1538	0	17	0	0	0
Story1	B94	94	Dead	Combination	23.0769	0	21	0	0	0
Story1	B94	94	Dead	Combination	25	0	24	0	0	0
Story1	B95	95	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B95	95	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B95	95	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B95	95	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B95	95	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B95	95	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B95	95	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B95	95	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B95	95	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B95	95	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B95	95	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B95	95	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B95	95	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B95	95	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B95	95	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B95	95	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B95	95	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B95	95	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B95	95	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B95	95	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B95	95	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B95	95	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B95	95	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B95	95	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B95	95	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B95	95	Super Dead	LinStatic	21.1539	0	0.3479	0	0	0
Story1	B95	95	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B95	95	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B95	95	Live	LinStatic	0	0	-1	0	0	0
Story1	B95	95	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B95	95	Live	LinStatic	3.8462	0	-1	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B95	95	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B95	95	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B95	95	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B95	95	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B95	95	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B95	95	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B95	95	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B95	95	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B95	95	Live	LinStatic	21.1539	0	1	0	0	0
Story1	B95	95	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B95	95	Live	LinStatic	25	0	1	0	0	0
Story1	B95	95	EQX	LinStatic	0	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B95	95	EQX	LinStatic	25	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	0	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B95	95	EQY	LinStatic	25	0	0	0	0	0
Story1	B95	95	Dead	Combination	0	0	-24	0	0	0
Story1	B95	95	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B95	95	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B95	95	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B95	95	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B95	95	Dead	Combination	9.6154	0	-6	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B95	95	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B95	95	Dead	Combination	13.4615	0	2	0	0	0
Story1	B95	95	Dead	Combination	15.3846	0	6	0	0	0
Story1	B95	95	Dead	Combination	17.3077	0	9	0	0	0
Story1	B95	95	Dead	Combination	19.2308	0	13	0	0	0
Story1	B95	95	Dead	Combination	21.1539	0	17	0	0	0
Story1	B95	95	Dead	Combination	23.0769	0	21	0	0	0
Story1	B95	95	Dead	Combination	25	0	24	0	0	0
Story1	B96	96	Self Weight	LinStatic	0	0	-13	0	0	0
Story1	B96	96	Self Weight	LinStatic	1.9286	0	-9	0	0	0
Story1	B96	96	Self Weight	LinStatic	3.8571	0	-6	0	0	0
Story1	B96	96	Self Weight	LinStatic	5.7857	0	-2	0	0	0
Story1	B96	96	Self Weight	LinStatic	7.7143	0	2	0	0	0
Story1	B96	96	Self Weight	LinStatic	9.6428	0	6	0	0	0
Story1	B96	96	Self Weight	LinStatic	11.5714	0	9	0	0	0
Story1	B96	96	Self Weight	LinStatic	13.5	0	13	0	0	0
Story1	B96	96	Super Dead	LinStatic	0	0	-0.2713	0	0	0
Story1	B96	96	Super Dead	LinStatic	1.9286	0	-0.1938	0	0	0
Story1	B96	96	Super Dead	LinStatic	3.8571	0	-0.1163	0	0	0
Story1	B96	96	Super Dead	LinStatic	5.7857	0	-0.03876	0	0	0
Story1	B96	96	Super Dead	LinStatic	7.7143	0	0.03876	0	0	0
Story1	B96	96	Super Dead	LinStatic	9.6428	0	0.1163	0	0	0
Story1	B96	96	Super Dead	LinStatic	11.5714	0	0.1938	0	0	0
Story1	B96	96	Super Dead	LinStatic	13.5	0	0.2713	0	0	0
Story1	B96	96	Live	LinStatic	0	0	-0.4428	0	0	0
Story1	B96	96	Live	LinStatic	1.9286	0	-0.3163	0	0	0
Story1	B96	96	Live	LinStatic	3.8571	0	-0.1898	0	0	0
Story1	B96	96	Live	LinStatic	5.7857	0	-0.06326	0	0	0
Story1	B96	96	Live	LinStatic	7.7143	0	0.06326	0	0	0
Story1	B96	96	Live	LinStatic	9.6428	0	0.1898	0	0	0
Story1	B96	96	Live	LinStatic	11.5714	0	0.3163	0	0	0
Story1	B96	96	Live	LinStatic	13.5	0	0.4428	0	0	0
Story1	B96	96	EQX	LinStatic	0	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	1.9286	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	3.8571	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	5.7857	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	7.7143	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	9.6428	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	11.5714	0	0	0	0	0
Story1	B96	96	EQX	LinStatic	13.5	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	0	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	1.9286	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	3.8571	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	5.7857	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	7.7143	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B96	96	EQY	LinStatic	9.6428	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	11.5714	0	0	0	0	0
Story1	B96	96	EQY	LinStatic	13.5	0	0	0	0	0
Story1	B96	96	Dead	Combination	0	0	-13	0	0	0
Story1	B96	96	Dead	Combination	1.9286	0	-9	0	0	0
Story1	B96	96	Dead	Combination	3.8571	0	-6	0	0	0
Story1	B96	96	Dead	Combination	5.7857	0	-2	0	0	0
Story1	B96	96	Dead	Combination	7.7143	0	2	0	0	0
Story1	B96	96	Dead	Combination	9.6428	0	6	0	0	0
Story1	B96	96	Dead	Combination	11.5714	0	9	0	0	0
Story1	B96	96	Dead	Combination	13.5	0	13	0	0	0
Story1	B97	97	Self Weight	LinStatic	0	0	-13	0	0	0
Story1	B97	97	Self Weight	LinStatic	1.9286	0	-9	0	0	0
Story1	B97	97	Self Weight	LinStatic	3.8571	0	-6	0	0	0
Story1	B97	97	Self Weight	LinStatic	5.7857	0	-2	0	0	0
Story1	B97	97	Self Weight	LinStatic	7.7143	0	2	0	0	0
Story1	B97	97	Self Weight	LinStatic	9.6429	0	6	0	0	0
Story1	B97	97	Self Weight	LinStatic	11.5714	0	9	0	0	0
Story1	B97	97	Self Weight	LinStatic	13.5	0	13	0	0	0
Story1	B97	97	Super Dead	LinStatic	0	0	-0.2713	0	0	0
Story1	B97	97	Super Dead	LinStatic	1.9286	0	-0.1938	0	0	0
Story1	B97	97	Super Dead	LinStatic	3.8571	0	-0.1163	0	0	0
Story1	B97	97	Super Dead	LinStatic	5.7857	0	-0.03876	0	0	0
Story1	B97	97	Super Dead	LinStatic	7.7143	0	0.03876	0	0	0
Story1	B97	97	Super Dead	LinStatic	9.6429	0	0.1163	0	0	0
Story1	B97	97	Super Dead	LinStatic	11.5714	0	0.1938	0	0	0
Story1	B97	97	Super Dead	LinStatic	13.5	0	0.2713	0	0	0
Story1	B97	97	Live	LinStatic	0	0	-0.4428	0	0	0
Story1	B97	97	Live	LinStatic	1.9286	0	-0.3163	0	0	0
Story1	B97	97	Live	LinStatic	3.8571	0	-0.1898	0	0	0
Story1	B97	97	Live	LinStatic	5.7857	0	-0.06326	0	0	0
Story1	B97	97	Live	LinStatic	7.7143	0	0.06326	0	0	0
Story1	B97	97	Live	LinStatic	9.6429	0	0.1898	0	0	0
Story1	B97	97	Live	LinStatic	11.5714	0	0.3163	0	0	0
Story1	B97	97	Live	LinStatic	13.5	0	0.4428	0	0	0
Story1	B97	97	EQX	LinStatic	0	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	1.9286	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	3.8571	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	5.7857	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	7.7143	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	9.6429	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	11.5714	0	0	0	0	0
Story1	B97	97	EQX	LinStatic	13.5	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	0	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	1.9286	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B97	97	EQY	LinStatic	3.8571	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	5.7857	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	7.7143	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	9.6429	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	11.5714	0	0	0	0	0
Story1	B97	97	EQY	LinStatic	13.5	0	0	0	0	0
Story1	B97	97	Dead	Combination	0	0	-13	0	0	0
Story1	B97	97	Dead	Combination	1.9286	0	-9	0	0	0
Story1	B97	97	Dead	Combination	3.8571	0	-6	0	0	0
Story1	B97	97	Dead	Combination	5.7857	0	-2	0	0	0
Story1	B97	97	Dead	Combination	7.7143	0	2	0	0	0
Story1	B97	97	Dead	Combination	9.6429	0	6	0	0	0
Story1	B97	97	Dead	Combination	11.5714	0	9	0	0	0
Story1	B97	97	Dead	Combination	13.5	0	13	0	0	0
Story1	B98	98	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B98	98	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B98	98	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B98	98	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B98	98	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B98	98	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B98	98	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B98	98	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B98	98	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B98	98	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B98	98	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B98	98	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B98	98	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B98	98	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B98	98	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B98	98	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B98	98	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B98	98	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B98	98	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B98	98	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B98	98	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B98	98	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B98	98	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B98	98	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B98	98	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B98	98	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B98	98	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B98	98	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B98	98	Live	LinStatic	0	0	-1	0	0	0
Story1	B98	98	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B98	98	Live	LinStatic	3.8462	0	-1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B98	98	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B98	98	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B98	98	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B98	98	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B98	98	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B98	98	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B98	98	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B98	98	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B98	98	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B98	98	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B98	98	Live	LinStatic	25	0	1	0	0	0
Story1	B98	98	EQX	LinStatic	0	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B98	98	EQX	LinStatic	25	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	0	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B98	98	EQY	LinStatic	25	0	0	0	0	0
Story1	B98	98	Dead	Combination	0	0	-24	0	0	0
Story1	B98	98	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B98	98	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B98	98	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B98	98	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B98	98	Dead	Combination	9.6154	0	-6	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B98	98	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B98	98	Dead	Combination	13.4615	0	2	0	0	0
Story1	B98	98	Dead	Combination	15.3846	0	6	0	0	0
Story1	B98	98	Dead	Combination	17.3077	0	9	0	0	0
Story1	B98	98	Dead	Combination	19.2308	0	13	0	0	0
Story1	B98	98	Dead	Combination	21.1538	0	17	0	0	0
Story1	B98	98	Dead	Combination	23.0769	0	21	0	0	0
Story1	B98	98	Dead	Combination	25	0	24	0	0	0
Story1	B99	99	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B99	99	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B99	99	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B99	99	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B99	99	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B99	99	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B99	99	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B99	99	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B99	99	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B99	99	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B99	99	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B99	99	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B99	99	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B99	99	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B99	99	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B99	99	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B99	99	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B99	99	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B99	99	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B99	99	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B99	99	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B99	99	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B99	99	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B99	99	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B99	99	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B99	99	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B99	99	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B99	99	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B99	99	Live	LinStatic	0	0	-1	0	0	0
Story1	B99	99	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B99	99	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B99	99	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B99	99	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B99	99	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B99	99	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B99	99	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B99	99	Live	LinStatic	15.3846	0	0.1892	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B99	99	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B99	99	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B99	99	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B99	99	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B99	99	Live	LinStatic	25	0	1	0	0	0
Story1	B99	99	EQX	LinStatic	0	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B99	99	EQX	LinStatic	25	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	0	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B99	99	EQY	LinStatic	25	0	0	0	0	0
Story1	B99	99	Dead	Combination	0	0	-24	0	0	0
Story1	B99	99	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B99	99	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B99	99	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B99	99	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B99	99	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B99	99	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B99	99	Dead	Combination	13.4615	0	2	0	0	0
Story1	B99	99	Dead	Combination	15.3846	0	6	0	0	0
Story1	B99	99	Dead	Combination	17.3077	0	9	0	0	0
Story1	B99	99	Dead	Combination	19.2308	0	13	0	0	0
Story1	B99	99	Dead	Combination	21.1538	0	17	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B99	99	Dead	Combination	23.0769	0	21	0	0	0
Story1	B99	99	Dead	Combination	25	0	24	0	0	0
Story1	B100	100	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B100	100	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B100	100	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B100	100	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B100	100	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B100	100	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B100	100	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B100	100	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B100	100	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B100	100	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B100	100	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B100	100	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B100	100	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B100	100	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B100	100	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B100	100	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B100	100	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B100	100	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B100	100	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B100	100	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B100	100	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B100	100	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B100	100	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B100	100	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B100	100	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B100	100	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B100	100	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B100	100	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B100	100	Live	LinStatic	0	0	-1	0	0	0
Story1	B100	100	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B100	100	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B100	100	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B100	100	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B100	100	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B100	100	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B100	100	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B100	100	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B100	100	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B100	100	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B100	100	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B100	100	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B100	100	Live	LinStatic	25	0	1	0	0	0
Story1	B100	100	EQX	LinStatic	0	0	0	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B100	100	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B100	100	EQX	LinStatic	25	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	0	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B100	100	EQY	LinStatic	25	0	0	0	0	0
Story1	B100	100	Dead	Combination	0	0	-24	0	0	0
Story1	B100	100	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B100	100	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B100	100	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B100	100	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B100	100	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B100	100	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B100	100	Dead	Combination	13.4615	0	2	0	0	0
Story1	B100	100	Dead	Combination	15.3846	0	6	0	0	0
Story1	B100	100	Dead	Combination	17.3077	0	9	0	0	0
Story1	B100	100	Dead	Combination	19.2308	0	13	0	0	0
Story1	B100	100	Dead	Combination	21.1538	0	17	0	0	0
Story1	B100	100	Dead	Combination	23.0769	0	21	0	0	0
Story1	B100	100	Dead	Combination	25	0	24	0	0	0
Story1	B101	101	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B101	101	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B101	101	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B101	101	Self Weight	LinStatic	5.7692	0	-13	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B101	101	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B101	101	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B101	101	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B101	101	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B101	101	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B101	101	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B101	101	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B101	101	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B101	101	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B101	101	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B101	101	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B101	101	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B101	101	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B101	101	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B101	101	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B101	101	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B101	101	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B101	101	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B101	101	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B101	101	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B101	101	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B101	101	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B101	101	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B101	101	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B101	101	Live	LinStatic	0	0	-1	0	0	0
Story1	B101	101	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B101	101	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B101	101	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B101	101	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B101	101	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B101	101	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B101	101	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B101	101	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B101	101	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B101	101	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B101	101	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B101	101	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B101	101	Live	LinStatic	25	0	1	0	0	0
Story1	B101	101	EQX	LinStatic	0	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	11.5385	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B101	101	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B101	101	EQX	LinStatic	25	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	0	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B101	101	EQY	LinStatic	25	0	0	0	0	0
Story1	B101	101	Dead	Combination	0	0	-24	0	0	0
Story1	B101	101	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B101	101	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B101	101	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B101	101	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B101	101	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B101	101	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B101	101	Dead	Combination	13.4615	0	2	0	0	0
Story1	B101	101	Dead	Combination	15.3846	0	6	0	0	0
Story1	B101	101	Dead	Combination	17.3077	0	9	0	0	0
Story1	B101	101	Dead	Combination	19.2308	0	13	0	0	0
Story1	B101	101	Dead	Combination	21.1538	0	17	0	0	0
Story1	B101	101	Dead	Combination	23.0769	0	21	0	0	0
Story1	B101	101	Dead	Combination	25	0	24	0	0	0
Story1	B102	102	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B102	102	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B102	102	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B102	102	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B102	102	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B102	102	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B102	102	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B102	102	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B102	102	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B102	102	Self Weight	LinStatic	17.3077	0	9	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B102	102	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B102	102	Self Weight	LinStatic	21.1538	0	16	0	0	0
Story1	B102	102	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B102	102	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B102	102	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B102	102	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0
Story1	B102	102	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B102	102	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B102	102	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B102	102	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B102	102	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B102	102	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B102	102	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B102	102	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B102	102	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B102	102	Super Dead	LinStatic	21.1538	0	0.3479	0	0	0
Story1	B102	102	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B102	102	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B102	102	Live	LinStatic	0	0	-1	0	0	0
Story1	B102	102	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B102	102	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B102	102	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B102	102	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B102	102	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B102	102	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B102	102	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B102	102	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B102	102	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B102	102	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B102	102	Live	LinStatic	21.1538	0	1	0	0	0
Story1	B102	102	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B102	102	Live	LinStatic	25	0	1	0	0	0
Story1	B102	102	EQX	LinStatic	0	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	21.1538	0	0	0	0	0
Story1	B102	102	EQX	LinStatic	23.0769	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B102	102	EQX	LinStatic	25	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	0	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	7.6923	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	21.1538	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B102	102	EQY	LinStatic	25	0	0	0	0	0
Story1	B102	102	Dead	Combination	0	0	-24	0	0	0
Story1	B102	102	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B102	102	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B102	102	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B102	102	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B102	102	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B102	102	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B102	102	Dead	Combination	13.4615	0	2	0	0	0
Story1	B102	102	Dead	Combination	15.3846	0	6	0	0	0
Story1	B102	102	Dead	Combination	17.3077	0	9	0	0	0
Story1	B102	102	Dead	Combination	19.2308	0	13	0	0	0
Story1	B102	102	Dead	Combination	21.1538	0	17	0	0	0
Story1	B102	102	Dead	Combination	23.0769	0	21	0	0	0
Story1	B102	102	Dead	Combination	25	0	24	0	0	0
Story1	B103	103	Self Weight	LinStatic	0	0	-24	0	0	0
Story1	B103	103	Self Weight	LinStatic	1.9231	0	-20	0	0	0
Story1	B103	103	Self Weight	LinStatic	3.8462	0	-16	0	0	0
Story1	B103	103	Self Weight	LinStatic	5.7692	0	-13	0	0	0
Story1	B103	103	Self Weight	LinStatic	7.6923	0	-9	0	0	0
Story1	B103	103	Self Weight	LinStatic	9.6154	0	-5	0	0	0
Story1	B103	103	Self Weight	LinStatic	11.5385	0	-2	0	0	0
Story1	B103	103	Self Weight	LinStatic	13.4615	0	2	0	0	0
Story1	B103	103	Self Weight	LinStatic	15.3846	0	5	0	0	0
Story1	B103	103	Self Weight	LinStatic	17.3077	0	9	0	0	0
Story1	B103	103	Self Weight	LinStatic	19.2308	0	13	0	0	0
Story1	B103	103	Self Weight	LinStatic	21.1539	0	16	0	0	0
Story1	B103	103	Self Weight	LinStatic	23.0769	0	20	0	0	0
Story1	B103	103	Self Weight	LinStatic	25	0	24	0	0	0
Story1	B103	103	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B103	103	Super Dead	LinStatic	1.9231	0	-0.4252	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B103	103	Super Dead	LinStatic	3.8462	0	-0.3479	0	0	0
Story1	B103	103	Super Dead	LinStatic	5.7692	0	-0.2706	0	0	0
Story1	B103	103	Super Dead	LinStatic	7.6923	0	-0.1933	0	0	0
Story1	B103	103	Super Dead	LinStatic	9.6154	0	-0.116	0	0	0
Story1	B103	103	Super Dead	LinStatic	11.5385	0	-0.03865	0	0	0
Story1	B103	103	Super Dead	LinStatic	13.4615	0	0.03865	0	0	0
Story1	B103	103	Super Dead	LinStatic	15.3846	0	0.116	0	0	0
Story1	B103	103	Super Dead	LinStatic	17.3077	0	0.1933	0	0	0
Story1	B103	103	Super Dead	LinStatic	19.2308	0	0.2706	0	0	0
Story1	B103	103	Super Dead	LinStatic	21.1539	0	0.3479	0	0	0
Story1	B103	103	Super Dead	LinStatic	23.0769	0	0.4252	0	0	0
Story1	B103	103	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B103	103	Live	LinStatic	0	0	-1	0	0	0
Story1	B103	103	Live	LinStatic	1.9231	0	-1	0	0	0
Story1	B103	103	Live	LinStatic	3.8462	0	-1	0	0	0
Story1	B103	103	Live	LinStatic	5.7692	0	-0.4415	0	0	0
Story1	B103	103	Live	LinStatic	7.6923	0	-0.3154	0	0	0
Story1	B103	103	Live	LinStatic	9.6154	0	-0.1892	0	0	0
Story1	B103	103	Live	LinStatic	11.5385	0	-0.06308	0	0	0
Story1	B103	103	Live	LinStatic	13.4615	0	0.06308	0	0	0
Story1	B103	103	Live	LinStatic	15.3846	0	0.1892	0	0	0
Story1	B103	103	Live	LinStatic	17.3077	0	0.3154	0	0	0
Story1	B103	103	Live	LinStatic	19.2308	0	0.4415	0	0	0
Story1	B103	103	Live	LinStatic	21.1539	0	1	0	0	0
Story1	B103	103	Live	LinStatic	23.0769	0	1	0	0	0
Story1	B103	103	Live	LinStatic	25	0	1	0	0	0
Story1	B103	103	EQX	LinStatic	0	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	1.9231	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	3.8462	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	5.7692	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	7.6923	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	9.6154	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	11.5385	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	13.4615	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	15.3846	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	17.3077	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	19.2308	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	21.1539	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	23.0769	0	0	0	0	0
Story1	B103	103	EQX	LinStatic	25	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	0	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	1.9231	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	3.8462	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	5.7692	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	7.6923	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B103	103	EQY	LinStatic	9.6154	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	11.5385	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	13.4615	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	15.3846	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	17.3077	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	19.2308	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	21.1539	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	23.0769	0	0	0	0	0
Story1	B103	103	EQY	LinStatic	25	0	0	0	0	0
Story1	B103	103	Dead	Combination	0	0	-24	0	0	0
Story1	B103	103	Dead	Combination	1.9231	0	-21	0	0	0
Story1	B103	103	Dead	Combination	3.8462	0	-17	0	0	0
Story1	B103	103	Dead	Combination	5.7692	0	-13	0	0	0
Story1	B103	103	Dead	Combination	7.6923	0	-9	0	0	0
Story1	B103	103	Dead	Combination	9.6154	0	-6	0	0	0
Story1	B103	103	Dead	Combination	11.5385	0	-2	0	0	0
Story1	B103	103	Dead	Combination	13.4615	0	2	0	0	0
Story1	B103	103	Dead	Combination	15.3846	0	6	0	0	0
Story1	B103	103	Dead	Combination	17.3077	0	9	0	0	0
Story1	B103	103	Dead	Combination	19.2308	0	13	0	0	0
Story1	B103	103	Dead	Combination	21.1539	0	17	0	0	0
Story1	B103	103	Dead	Combination	23.0769	0	21	0	0	0
Story1	B103	103	Dead	Combination	25	0	24	0	0	0
Story1	B104	21	Self Weight	LinStatic	0	0	-13	0	0	0
Story1	B104	21	Self Weight	LinStatic	1.9286	0	-9	0	0	0
Story1	B104	21	Self Weight	LinStatic	3.8571	0	-6	0	0	0
Story1	B104	21	Self Weight	LinStatic	5.7857	0	-2	0	0	0
Story1	B104	21	Self Weight	LinStatic	7.7143	0	2	0	0	0
Story1	B104	21	Self Weight	LinStatic	9.6429	0	6	0	0	0
Story1	B104	21	Self Weight	LinStatic	11.5714	0	9	0	0	0
Story1	B104	21	Self Weight	LinStatic	13.5	0	13	0	0	0
Story1	B104	21	Super Dead	LinStatic	0	0	-2	0	0	0
Story1	B104	21	Super Dead	LinStatic	1.9286	0	-1	0	0	0
Story1	B104	21	Super Dead	LinStatic	3.8571	0	-1	0	0	0
Story1	B104	21	Super Dead	LinStatic	5.7857	0	-0.2169	0	0	0
Story1	B104	21	Super Dead	LinStatic	7.7143	0	0.2169	0	0	0
Story1	B104	21	Super Dead	LinStatic	9.6429	0	1	0	0	0
Story1	B104	21	Super Dead	LinStatic	11.5714	0	1	0	0	0
Story1	B104	21	Super Dead	LinStatic	13.5	0	2	0	0	0
Story1	B104	21	Live	LinStatic	0	0	-2	0	0	0
Story1	B104	21	Live	LinStatic	1.9286	0	-2	0	0	0
Story1	B104	21	Live	LinStatic	3.8571	0	-1	0	0	0
Story1	B104	21	Live	LinStatic	5.7857	0	-0.3134	0	0	0
Story1	B104	21	Live	LinStatic	7.7143	0	0.3134	0	0	0
Story1	B104	21	Live	LinStatic	9.6429	0	1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B104	21	Live	LinStatic	11.5714	0	2	0	0	0
Story1	B104	21	Live	LinStatic	13.5	0	2	0	0	0
Story1	B104	21	EQX	LinStatic	0	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	1.9286	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	3.8571	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	5.7857	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	7.7143	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	9.6429	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	11.5714	0	0	0	0	0
Story1	B104	21	EQX	LinStatic	13.5	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	0	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	1.9286	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	3.8571	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	5.7857	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	7.7143	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	9.6429	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	11.5714	0	0	0	0	0
Story1	B104	21	EQY	LinStatic	13.5	0	0	0	0	0
Story1	B104	21	Dead	Combination	0	0	-14	0	0	0
Story1	B104	21	Dead	Combination	1.9286	0	-10	0	0	0
Story1	B104	21	Dead	Combination	3.8571	0	-6	0	0	0
Story1	B104	21	Dead	Combination	5.7857	0	-2	0	0	0
Story1	B104	21	Dead	Combination	7.7143	0	2	0	0	0
Story1	B104	21	Dead	Combination	9.6429	0	6	0	0	0
Story1	B104	21	Dead	Combination	11.5714	0	10	0	0	0
Story1	B104	21	Dead	Combination	13.5	0	14	0	0	0
Story1	B36	104	Self Weight	LinStatic	0	0	-4	0	0	0
Story1	B36	104	Self Weight	LinStatic	1.5	0	-1	0	0	0
Story1	B36	104	Self Weight	LinStatic	3	0	1	0	0	0
Story1	B36	104	Self Weight	LinStatic	4.5	0	4	0	0	0
Story1	B36	104	Self Weight	LinStatic	4.5	0	-3	0	0	0
Story1	B36	104	Self Weight	LinStatic	6.25	0	0	0	0	0
Story1	B36	104	Self Weight	LinStatic	8	0	3	0	0	0
Story1	B36	104	Self Weight	LinStatic	8	0	-8	0	0	0
Story1	B36	104	Self Weight	LinStatic	9.7	0	-5	0	0	0
Story1	B36	104	Self Weight	LinStatic	11.4	0	-2	0	0	0
Story1	B36	104	Self Weight	LinStatic	13.1	0	2	0	0	0
Story1	B36	104	Self Weight	LinStatic	14.8	0	5	0	0	0
Story1	B36	104	Self Weight	LinStatic	16.5	0	8	0	0	0
Story1	B36	104	Self Weight	LinStatic	16.5	0	-8	0	0	0
Story1	B36	104	Self Weight	LinStatic	18.2	0	-5	0	0	0
Story1	B36	104	Self Weight	LinStatic	19.9	0	-2	0	0	0
Story1	B36	104	Self Weight	LinStatic	21.6	0	2	0	0	0
Story1	B36	104	Self Weight	LinStatic	23.3	0	5	0	0	0
Story1	B36	104	Self Weight	LinStatic	25	0	8	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B36	104	Super Dead	LinStatic	0	0	-0.09045	0	0	0
Story1	B36	104	Super Dead	LinStatic	1.5	0	-0.03015	0	0	0
Story1	B36	104	Super Dead	LinStatic	3	0	0.03015	0	0	0
Story1	B36	104	Super Dead	LinStatic	4.5	0	0.09045	0	0	0
Story1	B36	104	Super Dead	LinStatic	4.5	0	-0.07035	0	0	0
Story1	B36	104	Super Dead	LinStatic	6.25	0	0	0	0	0
Story1	B36	104	Super Dead	LinStatic	8	0	0.07035	0	0	0
Story1	B36	104	Super Dead	LinStatic	8	0	-0.1709	0	0	0
Story1	B36	104	Super Dead	LinStatic	9.7	0	-0.1025	0	0	0
Story1	B36	104	Super Dead	LinStatic	11.4	0	-0.03417	0	0	0
Story1	B36	104	Super Dead	LinStatic	13.1	0	0.03417	0	0	0
Story1	B36	104	Super Dead	LinStatic	14.8	0	0.1025	0	0	0
Story1	B36	104	Super Dead	LinStatic	16.5	0	0.1709	0	0	0
Story1	B36	104	Super Dead	LinStatic	16.5	0	-0.1709	0	0	0
Story1	B36	104	Super Dead	LinStatic	18.2	0	-0.1025	0	0	0
Story1	B36	104	Super Dead	LinStatic	19.9	0	-0.03417	0	0	0
Story1	B36	104	Super Dead	LinStatic	21.6	0	0.03417	0	0	0
Story1	B36	104	Super Dead	LinStatic	23.3	0	0.1025	0	0	0
Story1	B36	104	Super Dead	LinStatic	25	0	0.1709	0	0	0
Story1	B36	104	Live	LinStatic	0	0	-0.1476	0	0	0
Story1	B36	104	Live	LinStatic	1.5	0	-0.0492	0	0	0
Story1	B36	104	Live	LinStatic	3	0	0.0492	0	0	0
Story1	B36	104	Live	LinStatic	4.5	0	0.1476	0	0	0
Story1	B36	104	Live	LinStatic	4.5	0	-0.1148	0	0	0
Story1	B36	104	Live	LinStatic	6.25	0	0	0	0	0
Story1	B36	104	Live	LinStatic	8	0	0.1148	0	0	0
Story1	B36	104	Live	LinStatic	8	0	-0.2788	0	0	0
Story1	B36	104	Live	LinStatic	9.7	0	-0.1673	0	0	0
Story1	B36	104	Live	LinStatic	11.4	0	-0.05576	0	0	0
Story1	B36	104	Live	LinStatic	13.1	0	0.05576	0	0	0
Story1	B36	104	Live	LinStatic	14.8	0	0.1673	0	0	0
Story1	B36	104	Live	LinStatic	16.5	0	0.2788	0	0	0
Story1	B36	104	Live	LinStatic	16.5	0	-0.2788	0	0	0
Story1	B36	104	Live	LinStatic	18.2	0	-0.1673	0	0	0
Story1	B36	104	Live	LinStatic	19.9	0	-0.05576	0	0	0
Story1	B36	104	Live	LinStatic	21.6	0	0.05576	0	0	0
Story1	B36	104	Live	LinStatic	23.3	0	0.1673	0	0	0
Story1	B36	104	Live	LinStatic	25	0	0.2788	0	0	0
Story1	B36	104	EQX	LinStatic	0	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	1.5	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	3	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	4.5	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	4.5	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	6.25	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	8	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B36	104	EQX	LinStatic	8	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	9.7	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	11.4	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	13.1	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	14.8	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	16.5	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	16.5	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	18.2	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	19.9	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	21.6	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	23.3	0	0	0	0	0
Story1	B36	104	EQX	LinStatic	25	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	0	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	1.5	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	3	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	4.5	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	4.5	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	6.25	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	8	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	8	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	9.7	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	11.4	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	13.1	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	14.8	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	16.5	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	16.5	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	18.2	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	19.9	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	21.6	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	23.3	0	0	0	0	0
Story1	B36	104	EQY	LinStatic	25	0	0	0	0	0
Story1	B36	104	Dead	Combination	0	0	-4	0	0	0
Story1	B36	104	Dead	Combination	1.5	0	-1	0	0	0
Story1	B36	104	Dead	Combination	3	0	1	0	0	0
Story1	B36	104	Dead	Combination	4.5	0	4	0	0	0
Story1	B36	104	Dead	Combination	4.5	0	-3	0	0	0
Story1	B36	104	Dead	Combination	6.25	0	0	0	0	0
Story1	B36	104	Dead	Combination	8	0	3	0	0	0
Story1	B36	104	Dead	Combination	8	0	-8	0	0	0
Story1	B36	104	Dead	Combination	9.7	0	-5	0	0	0
Story1	B36	104	Dead	Combination	11.4	0	-2	0	0	0
Story1	B36	104	Dead	Combination	13.1	0	2	0	0	0
Story1	B36	104	Dead	Combination	14.8	0	5	0	0	0
Story1	B36	104	Dead	Combination	16.5	0	8	0	0	0
Story1	B36	104	Dead	Combination	16.5	0	-8	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B36	104	Dead	Combination	18.2	0	-5	0	0	0
Story1	B36	104	Dead	Combination	19.9	0	-2	0	0	0
Story1	B36	104	Dead	Combination	21.6	0	2	0	0	0
Story1	B36	104	Dead	Combination	23.3	0	5	0	0	0
Story1	B36	104	Dead	Combination	25	0	8	0	0	0
Story1	B105	105	Self Weight	LinStatic	0	0	-8	0	0	0
Story1	B105	105	Self Weight	LinStatic	1.7	0	-5	0	0	0
Story1	B105	105	Self Weight	LinStatic	3.4	0	-2	0	0	0
Story1	B105	105	Self Weight	LinStatic	5.1	0	2	0	0	0
Story1	B105	105	Self Weight	LinStatic	6.8	0	5	0	0	0
Story1	B105	105	Self Weight	LinStatic	8.5	0	8	0	0	0
Story1	B105	105	Self Weight	LinStatic	8.5	0	-16	0	0	0
Story1	B105	105	Self Weight	LinStatic	10.3333	0	-12	0	0	0
Story1	B105	105	Self Weight	LinStatic	12.1667	0	-9	0	0	0
Story1	B105	105	Self Weight	LinStatic	14	0	-5	0	0	0
Story1	B105	105	Self Weight	LinStatic	15.8333	0	-2	0	0	0
Story1	B105	105	Self Weight	LinStatic	17.6667	0	2	0	0	0
Story1	B105	105	Self Weight	LinStatic	19.5	0	5	0	0	0
Story1	B105	105	Self Weight	LinStatic	21.3333	0	9	0	0	0
Story1	B105	105	Self Weight	LinStatic	23.1667	0	12	0	0	0
Story1	B105	105	Self Weight	LinStatic	25	0	16	0	0	0
Story1	B105	105	Super Dead	LinStatic	0	0	-0.1709	0	0	0
Story1	B105	105	Super Dead	LinStatic	1.7	0	-0.1025	0	0	0
Story1	B105	105	Super Dead	LinStatic	3.4	0	-0.03417	0	0	0
Story1	B105	105	Super Dead	LinStatic	5.1	0	0.03417	0	0	0
Story1	B105	105	Super Dead	LinStatic	6.8	0	0.1025	0	0	0
Story1	B105	105	Super Dead	LinStatic	8.5	0	0.1709	0	0	0
Story1	B105	105	Super Dead	LinStatic	8.5	0	-0.3317	0	0	0
Story1	B105	105	Super Dead	LinStatic	10.3333	0	-0.258	0	0	0
Story1	B105	105	Super Dead	LinStatic	12.1667	0	-0.1843	0	0	0
Story1	B105	105	Super Dead	LinStatic	14	0	-0.1106	0	0	0
Story1	B105	105	Super Dead	LinStatic	15.8333	0	-0.03685	0	0	0
Story1	B105	105	Super Dead	LinStatic	17.6667	0	0.03685	0	0	0
Story1	B105	105	Super Dead	LinStatic	19.5	0	0.1106	0	0	0
Story1	B105	105	Super Dead	LinStatic	21.3333	0	0.1843	0	0	0
Story1	B105	105	Super Dead	LinStatic	23.1667	0	0.258	0	0	0
Story1	B105	105	Super Dead	LinStatic	25	0	0.3317	0	0	0
Story1	B105	105	Live	LinStatic	0	0	-0.2788	0	0	0
Story1	B105	105	Live	LinStatic	1.7	0	-0.1673	0	0	0
Story1	B105	105	Live	LinStatic	3.4	0	-0.05576	0	0	0
Story1	B105	105	Live	LinStatic	5.1	0	0.05576	0	0	0
Story1	B105	105	Live	LinStatic	6.8	0	0.1673	0	0	0
Story1	B105	105	Live	LinStatic	8.5	0	0.2788	0	0	0
Story1	B105	105	Live	LinStatic	8.5	0	-1	0	0	0
Story1	B105	105	Live	LinStatic	10.3333	0	-0.4209	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B105	105	Live	LinStatic	12.1667	0	-0.3007	0	0	0
Story1	B105	105	Live	LinStatic	14	0	-0.1804	0	0	0
Story1	B105	105	Live	LinStatic	15.8333	0	-0.06013	0	0	0
Story1	B105	105	Live	LinStatic	17.6667	0	0.06013	0	0	0
Story1	B105	105	Live	LinStatic	19.5	0	0.1804	0	0	0
Story1	B105	105	Live	LinStatic	21.3333	0	0.3007	0	0	0
Story1	B105	105	Live	LinStatic	23.1667	0	0.4209	0	0	0
Story1	B105	105	Live	LinStatic	25	0	1	0	0	0
Story1	B105	105	EQX	LinStatic	0	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	1.7	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	3.4	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	5.1	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	6.8	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	8.5	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	8.5	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	10.3333	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	12.1667	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	14	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	15.8333	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	17.6667	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	19.5	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	21.3333	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	23.1667	0	0	0	0	0
Story1	B105	105	EQX	LinStatic	25	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	0	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	1.7	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	3.4	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	5.1	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	6.8	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	8.5	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	8.5	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	10.3333	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	12.1667	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	14	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	15.8333	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	17.6667	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	19.5	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	21.3333	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	23.1667	0	0	0	0	0
Story1	B105	105	EQY	LinStatic	25	0	0	0	0	0
Story1	B105	105	Dead	Combination	0	0	-8	0	0	0
Story1	B105	105	Dead	Combination	1.7	0	-5	0	0	0
Story1	B105	105	Dead	Combination	3.4	0	-2	0	0	0
Story1	B105	105	Dead	Combination	5.1	0	2	0	0	0
Story1	B105	105	Dead	Combination	6.8	0	5	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B105	105	Dead	Combination	8.5	0	8	0	0	0
Story1	B105	105	Dead	Combination	8.5	0	-16	0	0	0
Story1	B105	105	Dead	Combination	10.3333	0	-12	0	0	0
Story1	B105	105	Dead	Combination	12.1667	0	-9	0	0	0
Story1	B105	105	Dead	Combination	14	0	-5	0	0	0
Story1	B105	105	Dead	Combination	15.8333	0	-2	0	0	0
Story1	B105	105	Dead	Combination	17.6667	0	2	0	0	0
Story1	B105	105	Dead	Combination	19.5	0	5	0	0	0
Story1	B105	105	Dead	Combination	21.3333	0	9	0	0	0
Story1	B105	105	Dead	Combination	23.1667	0	12	0	0	0
Story1	B105	105	Dead	Combination	25	0	16	0	0	0
Story1	B106	106	Self Weight	LinStatic	0	0	-19	0	0	0
Story1	B106	106	Self Weight	LinStatic	1.95	0	-15	0	0	0
Story1	B106	106	Self Weight	LinStatic	3.9	0	-11	0	0	0
Story1	B106	106	Self Weight	LinStatic	5.85	0	-7	0	0	0
Story1	B106	106	Self Weight	LinStatic	7.8	0	-4	0	0	0
Story1	B106	106	Self Weight	LinStatic	9.75	0	0	0	0	0
Story1	B106	106	Self Weight	LinStatic	11.7	0	4	0	0	0
Story1	B106	106	Self Weight	LinStatic	13.65	0	7	0	0	0
Story1	B106	106	Self Weight	LinStatic	15.6	0	11	0	0	0
Story1	B106	106	Self Weight	LinStatic	17.55	0	15	0	0	0
Story1	B106	106	Self Weight	LinStatic	19.5	0	19	0	0	0
Story1	B106	106	Self Weight	LinStatic	19.5	0	-5	0	0	0
Story1	B106	106	Self Weight	LinStatic	21.3333	0	-2	0	0	0
Story1	B106	106	Self Weight	LinStatic	23.1667	0	2	0	0	0
Story1	B106	106	Self Weight	LinStatic	25	0	5	0	0	0
Story1	B106	106	Super Dead	LinStatic	0	0	-0.392	0	0	0
Story1	B106	106	Super Dead	LinStatic	1.95	0	-0.3136	0	0	0
Story1	B106	106	Super Dead	LinStatic	3.9	0	-0.2352	0	0	0
Story1	B106	106	Super Dead	LinStatic	5.85	0	-0.1568	0	0	0
Story1	B106	106	Super Dead	LinStatic	7.8	0	-0.07839	0	0	0
Story1	B106	106	Super Dead	LinStatic	9.75	0	0	0	0	0
Story1	B106	106	Super Dead	LinStatic	11.7	0	0.07839	0	0	0
Story1	B106	106	Super Dead	LinStatic	13.65	0	0.1568	0	0	0
Story1	B106	106	Super Dead	LinStatic	15.6	0	0.2352	0	0	0
Story1	B106	106	Super Dead	LinStatic	17.55	0	0.3136	0	0	0
Story1	B106	106	Super Dead	LinStatic	19.5	0	0.392	0	0	0
Story1	B106	106	Super Dead	LinStatic	19.5	0	-0.1106	0	0	0
Story1	B106	106	Super Dead	LinStatic	21.3333	0	-0.03685	0	0	0
Story1	B106	106	Super Dead	LinStatic	23.1667	0	0.03685	0	0	0
Story1	B106	106	Super Dead	LinStatic	25	0	0.1106	0	0	0
Story1	B106	106	Live	LinStatic	0	0	-1	0	0	0
Story1	B106	106	Live	LinStatic	1.95	0	-1	0	0	0
Story1	B106	106	Live	LinStatic	3.9	0	-0.3838	0	0	0
Story1	B106	106	Live	LinStatic	5.85	0	-0.2558	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B106	106	Live	LinStatic	7.8	0	-0.1279	0	0	0
Story1	B106	106	Live	LinStatic	9.75	0	0	0	0	0
Story1	B106	106	Live	LinStatic	11.7	0	0.1279	0	0	0
Story1	B106	106	Live	LinStatic	13.65	0	0.2558	0	0	0
Story1	B106	106	Live	LinStatic	15.6	0	0.3838	0	0	0
Story1	B106	106	Live	LinStatic	17.55	0	1	0	0	0
Story1	B106	106	Live	LinStatic	19.5	0	1	0	0	0
Story1	B106	106	Live	LinStatic	19.5	0	-0.1804	0	0	0
Story1	B106	106	Live	LinStatic	21.3333	0	-0.06013	0	0	0
Story1	B106	106	Live	LinStatic	23.1667	0	0.06013	0	0	0
Story1	B106	106	Live	LinStatic	25	0	0.1804	0	0	0
Story1	B106	106	EQX	LinStatic	0	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	1.95	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	3.9	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	5.85	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	7.8	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	9.75	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	11.7	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	13.65	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	15.6	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	17.55	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	19.5	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	19.5	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	21.3333	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	23.1667	0	0	0	0	0
Story1	B106	106	EQX	LinStatic	25	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	0	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	1.95	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	3.9	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	5.85	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	7.8	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	9.75	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	11.7	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	13.65	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	15.6	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	17.55	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	19.5	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	19.5	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	21.3333	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	23.1667	0	0	0	0	0
Story1	B106	106	EQY	LinStatic	25	0	0	0	0	0
Story1	B106	106	Dead	Combination	0	0	-19	0	0	0
Story1	B106	106	Dead	Combination	1.95	0	-15	0	0	0
Story1	B106	106	Dead	Combination	3.9	0	-11	0	0	0
Story1	B106	106	Dead	Combination	5.85	0	-8	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B106	106	Dead	Combination	7.8	0	-4	0	0	0
Story1	B106	106	Dead	Combination	9.75	0	0	0	0	0
Story1	B106	106	Dead	Combination	11.7	0	4	0	0	0
Story1	B106	106	Dead	Combination	13.65	0	8	0	0	0
Story1	B106	106	Dead	Combination	15.6	0	11	0	0	0
Story1	B106	106	Dead	Combination	17.55	0	15	0	0	0
Story1	B106	106	Dead	Combination	19.5	0	19	0	0	0
Story1	B106	106	Dead	Combination	19.5	0	-5	0	0	0
Story1	B106	106	Dead	Combination	21.3333	0	-2	0	0	0
Story1	B106	106	Dead	Combination	23.1667	0	2	0	0	0
Story1	B106	106	Dead	Combination	25	0	5	0	0	0
Story1	B107	107	Self Weight	LinStatic	0	0	-5	0	0	0
Story1	B107	107	Self Weight	LinStatic	1.8333	0	-2	0	0	0
Story1	B107	107	Self Weight	LinStatic	3.6667	0	2	0	0	0
Story1	B107	107	Self Weight	LinStatic	5.5	0	5	0	0	0
Story1	B107	107	Self Weight	LinStatic	5.5	0	-19	0	0	0
Story1	B107	107	Self Weight	LinStatic	7.45	0	-15	0	0	0
Story1	B107	107	Self Weight	LinStatic	9.4	0	-11	0	0	0
Story1	B107	107	Self Weight	LinStatic	11.35	0	-7	0	0	0
Story1	B107	107	Self Weight	LinStatic	13.3	0	-4	0	0	0
Story1	B107	107	Self Weight	LinStatic	15.25	0	0	0	0	0
Story1	B107	107	Self Weight	LinStatic	17.2	0	4	0	0	0
Story1	B107	107	Self Weight	LinStatic	19.15	0	7	0	0	0
Story1	B107	107	Self Weight	LinStatic	21.1	0	11	0	0	0
Story1	B107	107	Self Weight	LinStatic	23.05	0	15	0	0	0
Story1	B107	107	Self Weight	LinStatic	25	0	19	0	0	0
Story1	B107	107	Super Dead	LinStatic	0	0	-0.1106	0	0	0
Story1	B107	107	Super Dead	LinStatic	1.8333	0	-0.03685	0	0	0
Story1	B107	107	Super Dead	LinStatic	3.6667	0	0.03685	0	0	0
Story1	B107	107	Super Dead	LinStatic	5.5	0	0.1106	0	0	0
Story1	B107	107	Super Dead	LinStatic	5.5	0	-0.392	0	0	0
Story1	B107	107	Super Dead	LinStatic	7.45	0	-0.3136	0	0	0
Story1	B107	107	Super Dead	LinStatic	9.4	0	-0.2352	0	0	0
Story1	B107	107	Super Dead	LinStatic	11.35	0	-0.1568	0	0	0
Story1	B107	107	Super Dead	LinStatic	13.3	0	-0.07839	0	0	0
Story1	B107	107	Super Dead	LinStatic	15.25	0	0	0	0	0
Story1	B107	107	Super Dead	LinStatic	17.2	0	0.07839	0	0	0
Story1	B107	107	Super Dead	LinStatic	19.15	0	0.1568	0	0	0
Story1	B107	107	Super Dead	LinStatic	21.1	0	0.2352	0	0	0
Story1	B107	107	Super Dead	LinStatic	23.05	0	0.3136	0	0	0
Story1	B107	107	Super Dead	LinStatic	25	0	0.392	0	0	0
Story1	B107	107	Live	LinStatic	0	0	-0.1804	0	0	0
Story1	B107	107	Live	LinStatic	1.8333	0	-0.06013	0	0	0
Story1	B107	107	Live	LinStatic	3.6667	0	0.06013	0	0	0
Story1	B107	107	Live	LinStatic	5.5	0	0.1804	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B107	107	Live	LinStatic	5.5	0	-1	0	0	0
Story1	B107	107	Live	LinStatic	7.45	0	-1	0	0	0
Story1	B107	107	Live	LinStatic	9.4	0	-0.3838	0	0	0
Story1	B107	107	Live	LinStatic	11.35	0	-0.2558	0	0	0
Story1	B107	107	Live	LinStatic	13.3	0	-0.1279	0	0	0
Story1	B107	107	Live	LinStatic	15.25	0	0	0	0	0
Story1	B107	107	Live	LinStatic	17.2	0	0.1279	0	0	0
Story1	B107	107	Live	LinStatic	19.15	0	0.2558	0	0	0
Story1	B107	107	Live	LinStatic	21.1	0	0.3838	0	0	0
Story1	B107	107	Live	LinStatic	23.05	0	1	0	0	0
Story1	B107	107	Live	LinStatic	25	0	1	0	0	0
Story1	B107	107	EQX	LinStatic	0	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	1.8333	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	3.6667	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	5.5	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	5.5	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	7.45	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	9.4	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	11.35	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	13.3	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	15.25	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	17.2	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	19.15	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	21.1	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	23.05	0	0	0	0	0
Story1	B107	107	EQX	LinStatic	25	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	0	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	1.8333	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	3.6667	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	5.5	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	5.5	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	7.45	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	9.4	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	11.35	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	13.3	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	15.25	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	17.2	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	19.15	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	21.1	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	23.05	0	0	0	0	0
Story1	B107	107	EQY	LinStatic	25	0	0	0	0	0
Story1	B107	107	Dead	Combination	0	0	-5	0	0	0
Story1	B107	107	Dead	Combination	1.8333	0	-2	0	0	0
Story1	B107	107	Dead	Combination	3.6667	0	2	0	0	0
Story1	B107	107	Dead	Combination	5.5	0	5	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B107	107	Dead	Combination	5.5	0	-19	0	0	0
Story1	B107	107	Dead	Combination	7.45	0	-15	0	0	0
Story1	B107	107	Dead	Combination	9.4	0	-11	0	0	0
Story1	B107	107	Dead	Combination	11.35	0	-8	0	0	0
Story1	B107	107	Dead	Combination	13.3	0	-4	0	0	0
Story1	B107	107	Dead	Combination	15.25	0	0	0	0	0
Story1	B107	107	Dead	Combination	17.2	0	4	0	0	0
Story1	B107	107	Dead	Combination	19.15	0	8	0	0	0
Story1	B107	107	Dead	Combination	21.1	0	11	0	0	0
Story1	B107	107	Dead	Combination	23.05	0	15	0	0	0
Story1	B107	107	Dead	Combination	25	0	19	0	0	0
Story1	B108	150	Self Weight	LinStatic	0	4	0	0	0	0
Story1	B108	150	Self Weight	LinStatic	1	4	0	0	0	0
Story1	B108	150	Super Dead	LinStatic	0	0.09193	0	0	0	0
Story1	B108	150	Super Dead	LinStatic	1	0.09193	0	0	0	0
Story1	B108	150	Live	LinStatic	0	0.1503	0	0	0	0
Story1	B108	150	Live	LinStatic	1	0.1503	0	0	0	0
Story1	B108	150	EQX	LinStatic	0	-3	0	0	0	0
Story1	B108	150	EQX	LinStatic	1	-3	0	0	0	0
Story1	B108	150	EQY	LinStatic	0	0.09992	0	0	0	0
Story1	B108	150	EQY	LinStatic	1	0.09992	0	0	0	0
Story1	B108	150	Dead	Combination	0	4	0	0	0	0
Story1	B108	150	Dead	Combination	1	4	0	0	0	0
Story1	B109	151	Self Weight	LinStatic	0	-3	0	0	0	0
Story1	B109	151	Self Weight	LinStatic	1	-3	0	0	0	0
Story1	B109	151	Super Dead	LinStatic	0	-0.07156	0	0	0	0
Story1	B109	151	Super Dead	LinStatic	1	-0.07156	0	0	0	0
Story1	B109	151	Live	LinStatic	0	-0.1136	0	0	0	0
Story1	B109	151	Live	LinStatic	1	-0.1136	0	0	0	0
Story1	B109	151	EQX	LinStatic	0	0.1472	0	0	0	0
Story1	B109	151	EQX	LinStatic	1	0.1472	0	0	0	0
Story1	B109	151	EQY	LinStatic	0	-0.0465	0	0	0	0
Story1	B109	151	EQY	LinStatic	1	-0.0465	0	0	0	0
Story1	B109	151	Dead	Combination	0	-3	0	0	0	0
Story1	B109	151	Dead	Combination	1	-3	0	0	0	0
Story1	B110	152	Self Weight	LinStatic	0	-17	0	0	0	0
Story1	B110	152	Self Weight	LinStatic	1	-17	0	0	0	0
Story1	B110	152	Super Dead	LinStatic	0	-0.3935	0	0	0	0
Story1	B110	152	Super Dead	LinStatic	1	-0.3935	0	0	0	0
Story1	B110	152	Live	LinStatic	0	-1	0	0	0	0
Story1	B110	152	Live	LinStatic	1	-1	0	0	0	0
Story1	B110	152	EQX	LinStatic	0	2	0	0	0	0
Story1	B110	152	EQX	LinStatic	1	2	0	0	0	0
Story1	B110	152	EQY	LinStatic	0	-0.2064	0	0	0	0
Story1	B110	152	EQY	LinStatic	1	-0.2064	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B110	152	Dead	Combination	0	-17	0	0	0	0
Story1	B110	152	Dead	Combination	1	-17	0	0	0	0
Story1	B111	147	Self Weight	LinStatic	0	4	0	0	0	0
Story1	B111	147	Self Weight	LinStatic	1	4	0	0	0	0
Story1	B111	147	Super Dead	LinStatic	0	0.0674	0	0	0	0
Story1	B111	147	Super Dead	LinStatic	1	0.0674	0	0	0	0
Story1	B111	147	Live	LinStatic	0	0.1152	0	0	0	0
Story1	B111	147	Live	LinStatic	1	0.1152	0	0	0	0
Story1	B111	147	EQX	LinStatic	0	4	0	0	0	0
Story1	B111	147	EQX	LinStatic	1	4	0	0	0	0
Story1	B111	147	EQY	LinStatic	0	-0.1821	0	0	0	0
Story1	B111	147	EQY	LinStatic	1	-0.1821	0	0	0	0
Story1	B111	147	Dead	Combination	0	4	0	0	0	0
Story1	B111	147	Dead	Combination	1	4	0	0	0	0
Story1	B112	148	Self Weight	LinStatic	0	-3	0	0	0	0
Story1	B112	148	Self Weight	LinStatic	1	-3	0	0	0	0
Story1	B112	148	Super Dead	LinStatic	0	-0.05923	0	0	0	0
Story1	B112	148	Super Dead	LinStatic	1	-0.05923	0	0	0	0
Story1	B112	148	Live	LinStatic	0	-0.09667	0	0	0	0
Story1	B112	148	Live	LinStatic	1	-0.09667	0	0	0	0
Story1	B112	148	EQX	LinStatic	0	-0.0002741	0	0	0	0
Story1	B112	148	EQX	LinStatic	1	-0.0002741	0	0	0	0
Story1	B112	148	EQY	LinStatic	0	0.0002024	0	0	0	0
Story1	B112	148	EQY	LinStatic	1	0.0002024	0	0	0	0
Story1	B112	148	Dead	Combination	0	-3	0	0	0	0
Story1	B112	148	Dead	Combination	1	-3	0	0	0	0
Story1	B113	149	Self Weight	LinStatic	0	-17	0	0	0	0
Story1	B113	149	Self Weight	LinStatic	1	-17	0	0	0	0
Story1	B113	149	Super Dead	LinStatic	0	-0.3398	0	0	0	0
Story1	B113	149	Super Dead	LinStatic	1	-0.3398	0	0	0	0
Story1	B113	149	Live	LinStatic	0	-1	0	0	0	0
Story1	B113	149	Live	LinStatic	1	-1	0	0	0	0
Story1	B113	149	EQX	LinStatic	0	-2	0	0	0	0
Story1	B113	149	EQX	LinStatic	1	-2	0	0	0	0
Story1	B113	149	EQY	LinStatic	0	0.09995	0	0	0	0
Story1	B113	149	EQY	LinStatic	1	0.09995	0	0	0	0
Story1	B113	149	Dead	Combination	0	-17	0	0	0	0
Story1	B113	149	Dead	Combination	1	-17	0	0	0	0
Story1	B114	114	Self Weight	LinStatic	0	0	-0.006194	0	0	0
Story1	B114	114	Self Weight	LinStatic	1	0	-0.006194	0	0	0
Story1	B114	114	Super Dead	LinStatic	0	0	-0.05074	0	0	0
Story1	B114	114	Super Dead	LinStatic	1	0	-0.05074	0	0	0
Story1	B114	114	Live	LinStatic	0	0	-0.07129	0	0	0
Story1	B114	114	Live	LinStatic	1	0	-0.07129	0	0	0
Story1	B114	114	EQX	LinStatic	0	0	8	0	1.214E-05	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B114	114	EQX	LinStatic	1	0	8	0	1.214E-05	0
Story1	B114	114	EQY	LinStatic	0	0	-0.3995	0	-2.686E-06	0
Story1	B114	114	EQY	LinStatic	1	0	-0.3995	0	-2.686E-06	0
Story1	B114	114	Dead	Combination	0	0	-0.05693	0	0	0
Story1	B114	114	Dead	Combination	1	0	-0.05693	0	0	0
Story1	B115	115	Self Weight	LinStatic	0	-5	0.0002871	-1.872E-05	0	-9.359E-06
Story1	B115	115	Self Weight	LinStatic	1	-5	0.0002871	-1.872E-05	0	9.359E-06
Story1	B115	115	Super Dead	LinStatic	0	-0.09955	-0.03982	1.094E-05	0	5.471E-06
Story1	B115	115	Super Dead	LinStatic	1	-0.09955	-0.03982	1.094E-05	0	-5.471E-06
Story1	B115	115	Live	LinStatic	0	-0.162	-0.05592	1.528E-05	0	7.639E-06
Story1	B115	115	Live	LinStatic	1	-0.162	-0.05592	1.528E-05	0	-7.639E-06
Story1	B115	115	EQX	LinStatic	0	0.02256	6	-0.0005584	8.6E-06	-0.0002792
Story1	B115	115	EQX	LinStatic	1	0.02256	6	-0.0005584	8.6E-06	0.0002792
Story1	B115	115	EQY	LinStatic	0	-0.00678	-0.3098	0.0001235	-1.902E-06	6.176E-05
Story1	B115	115	EQY	LinStatic	1	-0.00678	-0.3098	0.0001235	-1.902E-06	-6.176E-05
Story1	B115	115	Dead	Combination	0	-5	-0.03953	-7.776E-06	0	-3.888E-06
Story1	B115	115	Dead	Combination	1	-5	-0.03953	-7.776E-06	0	3.888E-06
Story1	B116	116	Self Weight	LinStatic	0	0	1	0	0	0
Story1	B116	116	Self Weight	LinStatic	1	0	1	0	0	0
Story1	B116	116	Super Dead	LinStatic	0	0	0.1095	0	0	0
Story1	B116	116	Super Dead	LinStatic	1	0	0.1095	0	0	0
Story1	B116	116	Live	LinStatic	0	0	0.1595	0	0	0
Story1	B116	116	Live	LinStatic	1	0	0.1595	0	0	0
Story1	B116	116	EQX	LinStatic	0	0	1	0	1.27E-05	0
Story1	B116	116	EQX	LinStatic	1	0	1	0	1.27E-05	0
Story1	B116	116	EQY	LinStatic	0	0	7	0	-2.81E-06	0
Story1	B116	116	EQY	LinStatic	1	0	7	0	-2.81E-06	0
Story1	B116	116	Dead	Combination	0	0	1	0	0	0
Story1	B116	116	Dead	Combination	1	0	1	0	0	0
Story1	B117	117	Self Weight	LinStatic	0	4	1	-1.78E-05	0	-8.951E-06
Story1	B117	117	Self Weight	LinStatic	1	4	1	-1.78E-05	0	8.846E-06
Story1	B117	117	Super Dead	LinStatic	0	0.4413	0.07115	1.04E-05	0	5.233E-06
Story1	B117	117	Super Dead	LinStatic	1	0.4413	0.07115	1.04E-05	0	-5.171E-06
Story1	B117	117	Live	LinStatic	0	1	0.1039	1.453E-05	0	7.306E-06
Story1	B117	117	Live	LinStatic	1	1	0.1039	1.453E-05	0	-7.22E-06
Story1	B117	117	EQX	LinStatic	0	-0.3342	1	-0.0005309	7.944E-06	-0.000267
Story1	B117	117	EQX	LinStatic	1	-0.3342	1	-0.0005309	7.944E-06	0.0002639
Story1	B117	117	EQY	LinStatic	0	-3	5	0.0001174	-1.757E-06	5.907E-05
Story1	B117	117	EQY	LinStatic	1	-3	5	0.0001174	-1.757E-06	-5.837E-05
Story1	B117	117	Dead	Combination	0	4	1	-7.393E-06	0	-3.718E-06
Story1	B117	117	Dead	Combination	1	4	1	-7.393E-06	0	3.675E-06
Story1	B118	146	Self Weight	LinStatic	0	-1	0	0	0	0
Story1	B118	146	Self Weight	LinStatic	1	-1	0	0	0	0
Story1	B118	146	Super Dead	LinStatic	0	-0.09231	0	0	0	0
Story1	B118	146	Super Dead	LinStatic	1	-0.09231	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B118	146	Live	LinStatic	0	-0.1337	0	0	0	0
Story1	B118	146	Live	LinStatic	1	-0.1337	0	0	0	0
Story1	B118	146	EQX	LinStatic	0	-0.2023	0	0	0	0
Story1	B118	146	EQX	LinStatic	1	-0.2023	0	0	0	0
Story1	B118	146	EQY	LinStatic	0	-1	0	0	0	0
Story1	B118	146	EQY	LinStatic	1	-1	0	0	0	0
Story1	B118	146	Dead	Combination	0	-1	0	0	0	0
Story1	B118	146	Dead	Combination	1	-1	0	0	0	0
Story1	B119	145	Self Weight	LinStatic	0	-6	0	0	0	0
Story1	B119	145	Self Weight	LinStatic	1	-6	0	0	0	0
Story1	B119	145	Super Dead	LinStatic	0	-1	0	0	0	0
Story1	B119	145	Super Dead	LinStatic	1	-1	0	0	0	0
Story1	B119	145	Live	LinStatic	0	-1	0	0	0	0
Story1	B119	145	Live	LinStatic	1	-1	0	0	0	0
Story1	B119	145	EQX	LinStatic	0	0.4188	0	0	0	0
Story1	B119	145	EQX	LinStatic	1	0.4188	0	0	0	0
Story1	B119	145	EQY	LinStatic	0	3	0	0	0	0
Story1	B119	145	EQY	LinStatic	1	3	0	0	0	0
Story1	B119	145	Dead	Combination	0	-7	0	0	0	0
Story1	B119	145	Dead	Combination	1	-7	0	0	0	0
Story1	B120	144	Self Weight	LinStatic	0	-3	0	0	0	0
Story1	B120	144	Self Weight	LinStatic	1	-3	0	0	0	0
Story1	B120	144	Super Dead	LinStatic	0	-0.3522	0	0	0	0
Story1	B120	144	Super Dead	LinStatic	1	-0.3522	0	0	0	0
Story1	B120	144	Live	LinStatic	0	-1	0	0	0	0
Story1	B120	144	Live	LinStatic	1	-1	0	0	0	0
Story1	B120	144	EQX	LinStatic	0	0.177	0	0	0	0
Story1	B120	144	EQX	LinStatic	1	0.177	0	0	0	0
Story1	B120	144	EQY	LinStatic	0	1	0	0	0	0
Story1	B120	144	EQY	LinStatic	1	1	0	0	0	0
Story1	B120	144	Dead	Combination	0	-3	0	0	0	0
Story1	B120	144	Dead	Combination	1	-3	0	0	0	0
Story1	B121	141	Self Weight	LinStatic	0	2	0	0	0	0
Story1	B121	141	Self Weight	LinStatic	1	2	0	0	0	0
Story1	B121	141	Super Dead	LinStatic	0	0.3143	0	0	0	0
Story1	B121	141	Super Dead	LinStatic	1	0.3143	0	0	0	0
Story1	B121	141	Live	LinStatic	0	0.4496	0	0	0	0
Story1	B121	141	Live	LinStatic	1	0.4496	0	0	0	0
Story1	B121	141	EQX	LinStatic	0	1	0	0	0	0
Story1	B121	141	EQX	LinStatic	1	1	0	0	0	0
Story1	B121	141	EQY	LinStatic	0	0.2862	0	0	0	0
Story1	B121	141	EQY	LinStatic	1	0.2862	0	0	0	0
Story1	B121	141	Dead	Combination	0	2	0	0	0	0
Story1	B121	141	Dead	Combination	1	2	0	0	0	0
Story1	B122	142	Self Weight	LinStatic	0	-1	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B122	142	Self Weight	LinStatic	1	-1	0	0	0	0
Story1	B122	142	Super Dead	LinStatic	0	-0.09817	0	0	0	0
Story1	B122	142	Super Dead	LinStatic	1	-0.09817	0	0	0	0
Story1	B122	142	Live	LinStatic	0	-0.1437	0	0	0	0
Story1	B122	142	Live	LinStatic	1	-0.1437	0	0	0	0
Story1	B122	142	EQX	LinStatic	0	-0.1669	0	0	0	0
Story1	B122	142	EQX	LinStatic	1	-0.1669	0	0	0	0
Story1	B122	142	EQY	LinStatic	0	-2	0	0	0	0
Story1	B122	142	EQY	LinStatic	1	-2	0	0	0	0
Story1	B122	142	Dead	Combination	0	-1	0	0	0	0
Story1	B122	142	Dead	Combination	1	-1	0	0	0	0
Story1	B123	143	Self Weight	LinStatic	0	-8	0	0	0	0
Story1	B123	143	Self Weight	LinStatic	1	-8	0	0	0	0
Story1	B123	143	Super Dead	LinStatic	0	-1	0	0	0	0
Story1	B123	143	Super Dead	LinStatic	1	-1	0	0	0	0
Story1	B123	143	Live	LinStatic	0	-1	0	0	0	0
Story1	B123	143	Live	LinStatic	1	-1	0	0	0	0
Story1	B123	143	EQX	LinStatic	0	0.06898	0	0	0	0
Story1	B123	143	EQX	LinStatic	1	0.06898	0	0	0	0
Story1	B123	143	EQY	LinStatic	0	-4	0	0	0	0
Story1	B123	143	EQY	LinStatic	1	-4	0	0	0	0
Story1	B123	143	Dead	Combination	0	-9	0	0	0	0
Story1	B123	143	Dead	Combination	1	-9	0	0	0	0
Story1	B124	124	Self Weight	LinStatic	0	0	-4	0	0	0
Story1	B124	124	Self Weight	LinStatic	1.5	0	-1	0	0	0
Story1	B124	124	Self Weight	LinStatic	3	0	1	0	0	0
Story1	B124	124	Self Weight	LinStatic	4.5	0	4	0	0	0
Story1	B124	124	Self Weight	LinStatic	4.5	0	-3	0	0	0
Story1	B124	124	Self Weight	LinStatic	6.25	0	0	0	0	0
Story1	B124	124	Self Weight	LinStatic	8	0	3	0	0	0
Story1	B124	124	Self Weight	LinStatic	8	0	-8	0	0	0
Story1	B124	124	Self Weight	LinStatic	9.7	0	-5	0	0	0
Story1	B124	124	Self Weight	LinStatic	11.4	0	-2	0	0	0
Story1	B124	124	Self Weight	LinStatic	13.1	0	2	0	0	0
Story1	B124	124	Self Weight	LinStatic	14.8	0	5	0	0	0
Story1	B124	124	Self Weight	LinStatic	16.5	0	8	0	0	0
Story1	B124	124	Self Weight	LinStatic	16.5	0	-8	0	0	0
Story1	B124	124	Self Weight	LinStatic	18.2	0	-5	0	0	0
Story1	B124	124	Self Weight	LinStatic	19.9	0	-2	0	0	0
Story1	B124	124	Self Weight	LinStatic	21.6	0	2	0	0	0
Story1	B124	124	Self Weight	LinStatic	23.3	0	5	0	0	0
Story1	B124	124	Self Weight	LinStatic	25	0	8	0	0	0
Story1	B124	124	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B124	124	Super Dead	LinStatic	1.5	0	-0.1687	0	0	0
Story1	B124	124	Super Dead	LinStatic	3	0	0.1687	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B124	124	Super Dead	LinStatic	4.5	0	1	0	0	0
Story1	B124	124	Super Dead	LinStatic	4.5	0	-0.3936	0	0	0
Story1	B124	124	Super Dead	LinStatic	6.25	0	0	0	0	0
Story1	B124	124	Super Dead	LinStatic	8	0	0.3936	0	0	0
Story1	B124	124	Super Dead	LinStatic	8	0	-1	0	0	0
Story1	B124	124	Super Dead	LinStatic	9.7	0	-1	0	0	0
Story1	B124	124	Super Dead	LinStatic	11.4	0	-0.1912	0	0	0
Story1	B124	124	Super Dead	LinStatic	13.1	0	0.1912	0	0	0
Story1	B124	124	Super Dead	LinStatic	14.8	0	1	0	0	0
Story1	B124	124	Super Dead	LinStatic	16.5	0	1	0	0	0
Story1	B124	124	Super Dead	LinStatic	16.5	0	-1	0	0	0
Story1	B124	124	Super Dead	LinStatic	18.2	0	-1	0	0	0
Story1	B124	124	Super Dead	LinStatic	19.9	0	-0.1912	0	0	0
Story1	B124	124	Super Dead	LinStatic	21.6	0	0.1912	0	0	0
Story1	B124	124	Super Dead	LinStatic	23.3	0	1	0	0	0
Story1	B124	124	Super Dead	LinStatic	25	0	1	0	0	0
Story1	B124	124	Live	LinStatic	0	0	-1	0	0	0
Story1	B124	124	Live	LinStatic	1.5	0	-0.2438	0	0	0
Story1	B124	124	Live	LinStatic	3	0	0.2438	0	0	0
Story1	B124	124	Live	LinStatic	4.5	0	1	0	0	0
Story1	B124	124	Live	LinStatic	4.5	0	-1	0	0	0
Story1	B124	124	Live	LinStatic	6.25	0	0	0	0	0
Story1	B124	124	Live	LinStatic	8	0	1	0	0	0
Story1	B124	124	Live	LinStatic	8	0	-1	0	0	0
Story1	B124	124	Live	LinStatic	9.7	0	-1	0	0	0
Story1	B124	124	Live	LinStatic	11.4	0	-0.2763	0	0	0
Story1	B124	124	Live	LinStatic	13.1	0	0.2763	0	0	0
Story1	B124	124	Live	LinStatic	14.8	0	1	0	0	0
Story1	B124	124	Live	LinStatic	16.5	0	1	0	0	0
Story1	B124	124	Live	LinStatic	16.5	0	-1	0	0	0
Story1	B124	124	Live	LinStatic	18.2	0	-1	0	0	0
Story1	B124	124	Live	LinStatic	19.9	0	-0.2763	0	0	0
Story1	B124	124	Live	LinStatic	21.6	0	0.2763	0	0	0
Story1	B124	124	Live	LinStatic	23.3	0	1	0	0	0
Story1	B124	124	Live	LinStatic	25	0	1	0	0	0
Story1	B124	124	EQX	LinStatic	0	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	1.5	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	3	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	4.5	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	4.5	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	6.25	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	8	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	8	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	9.7	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	11.4	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B124	124	EQX	LinStatic	13.1	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	14.8	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	16.5	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	16.5	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	18.2	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	19.9	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	21.6	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	23.3	0	0	0	0	0
Story1	B124	124	EQX	LinStatic	25	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	0	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	1.5	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	3	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	4.5	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	4.5	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	6.25	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	8	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	8	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	9.7	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	11.4	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	13.1	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	14.8	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	16.5	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	16.5	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	18.2	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	19.9	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	21.6	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	23.3	0	0	0	0	0
Story1	B124	124	EQY	LinStatic	25	0	0	0	0	0
Story1	B124	124	Dead	Combination	0	0	-5	0	0	0
Story1	B124	124	Dead	Combination	1.5	0	-2	0	0	0
Story1	B124	124	Dead	Combination	3	0	2	0	0	0
Story1	B124	124	Dead	Combination	4.5	0	5	0	0	0
Story1	B124	124	Dead	Combination	4.5	0	-4	0	0	0
Story1	B124	124	Dead	Combination	6.25	0	0	0	0	0
Story1	B124	124	Dead	Combination	8	0	4	0	0	0
Story1	B124	124	Dead	Combination	8	0	-9	0	0	0
Story1	B124	124	Dead	Combination	9.7	0	-5	0	0	0
Story1	B124	124	Dead	Combination	11.4	0	-2	0	0	0
Story1	B124	124	Dead	Combination	13.1	0	2	0	0	0
Story1	B124	124	Dead	Combination	14.8	0	5	0	0	0
Story1	B124	124	Dead	Combination	16.5	0	9	0	0	0
Story1	B124	124	Dead	Combination	16.5	0	-9	0	0	0
Story1	B124	124	Dead	Combination	18.2	0	-5	0	0	0
Story1	B124	124	Dead	Combination	19.9	0	-2	0	0	0
Story1	B124	124	Dead	Combination	21.6	0	2	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B124	124	Dead	Combination	23.3	0	5	0	0	0
Story1	B124	124	Dead	Combination	25	0	9	0	0	0
Story1	B125	125	Self Weight	LinStatic	0	0	-8	0	0	0
Story1	B125	125	Self Weight	LinStatic	1.7	0	-5	0	0	0
Story1	B125	125	Self Weight	LinStatic	3.4	0	-2	0	0	0
Story1	B125	125	Self Weight	LinStatic	5.1	0	2	0	0	0
Story1	B125	125	Self Weight	LinStatic	6.8	0	5	0	0	0
Story1	B125	125	Self Weight	LinStatic	8.5	0	8	0	0	0
Story1	B125	125	Self Weight	LinStatic	8.5	0	-16	0	0	0
Story1	B125	125	Self Weight	LinStatic	10.3333	0	-12	0	0	0
Story1	B125	125	Self Weight	LinStatic	12.1667	0	-9	0	0	0
Story1	B125	125	Self Weight	LinStatic	14	0	-5	0	0	0
Story1	B125	125	Self Weight	LinStatic	15.8333	0	-2	0	0	0
Story1	B125	125	Self Weight	LinStatic	17.6667	0	2	0	0	0
Story1	B125	125	Self Weight	LinStatic	19.5	0	5	0	0	0
Story1	B125	125	Self Weight	LinStatic	21.3333	0	9	0	0	0
Story1	B125	125	Self Weight	LinStatic	23.1667	0	12	0	0	0
Story1	B125	125	Self Weight	LinStatic	25	0	16	0	0	0
Story1	B125	125	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B125	125	Super Dead	LinStatic	1.7	0	-1	0	0	0
Story1	B125	125	Super Dead	LinStatic	3.4	0	-0.1912	0	0	0
Story1	B125	125	Super Dead	LinStatic	5.1	0	0.1912	0	0	0
Story1	B125	125	Super Dead	LinStatic	6.8	0	1	0	0	0
Story1	B125	125	Super Dead	LinStatic	8.5	0	1	0	0	0
Story1	B125	125	Super Dead	LinStatic	8.5	0	-2	0	0	0
Story1	B125	125	Super Dead	LinStatic	10.3333	0	-1	0	0	0
Story1	B125	125	Super Dead	LinStatic	12.1667	0	-1	0	0	0
Story1	B125	125	Super Dead	LinStatic	14	0	-1	0	0	0
Story1	B125	125	Super Dead	LinStatic	15.8333	0	-0.2062	0	0	0
Story1	B125	125	Super Dead	LinStatic	17.6667	0	0.2062	0	0	0
Story1	B125	125	Super Dead	LinStatic	19.5	0	1	0	0	0
Story1	B125	125	Super Dead	LinStatic	21.3333	0	1	0	0	0
Story1	B125	125	Super Dead	LinStatic	23.1667	0	1	0	0	0
Story1	B125	125	Super Dead	LinStatic	25	0	2	0	0	0
Story1	B125	125	Live	LinStatic	0	0	-1	0	0	0
Story1	B125	125	Live	LinStatic	1.7	0	-1	0	0	0
Story1	B125	125	Live	LinStatic	3.4	0	-0.2763	0	0	0
Story1	B125	125	Live	LinStatic	5.1	0	0.2763	0	0	0
Story1	B125	125	Live	LinStatic	6.8	0	1	0	0	0
Story1	B125	125	Live	LinStatic	8.5	0	1	0	0	0
Story1	B125	125	Live	LinStatic	8.5	0	-3	0	0	0
Story1	B125	125	Live	LinStatic	10.3333	0	-2	0	0	0
Story1	B125	125	Live	LinStatic	12.1667	0	-1	0	0	0
Story1	B125	125	Live	LinStatic	14	0	-1	0	0	0
Story1	B125	125	Live	LinStatic	15.8333	0	-0.2979	0	0	0



Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B125	125	Live	LinStatic	17.6667	0	0.2979	0	0	0
Story1	B125	125	Live	LinStatic	19.5	0	1	0	0	0
Story1	B125	125	Live	LinStatic	21.3333	0	1	0	0	0
Story1	B125	125	Live	LinStatic	23.1667	0	2	0	0	0
Story1	B125	125	Live	LinStatic	25	0	3	0	0	0
Story1	B125	125	EQX	LinStatic	0	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	1.7	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	3.4	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	5.1	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	6.8	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	8.5	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	8.5	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	10.3333	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	12.1667	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	14	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	15.8333	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	17.6667	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	19.5	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	21.3333	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	23.1667	0	0	0	0	0
Story1	B125	125	EQX	LinStatic	25	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	0	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	1.7	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	3.4	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	5.1	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	6.8	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	8.5	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	8.5	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	10.3333	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	12.1667	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	14	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	15.8333	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	17.6667	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	19.5	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	21.3333	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	23.1667	0	0	0	0	0
Story1	B125	125	EQY	LinStatic	25	0	0	0	0	0
Story1	B125	125	Dead	Combination	0	0	-9	0	0	0
Story1	B125	125	Dead	Combination	1.7	0	-5	0	0	0
Story1	B125	125	Dead	Combination	3.4	0	-2	0	0	0
Story1	B125	125	Dead	Combination	5.1	0	2	0	0	0
Story1	B125	125	Dead	Combination	6.8	0	5	0	0	0
Story1	B125	125	Dead	Combination	8.5	0	9	0	0	0
Story1	B125	125	Dead	Combination	8.5	0	-18	0	0	0
Story1	B125	125	Dead	Combination	10.3333	0	-14	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B125	125	Dead	Combination	12.1667	0	-10	0	0	0
Story1	B125	125	Dead	Combination	14	0	-6	0	0	0
Story1	B125	125	Dead	Combination	15.8333	0	-2	0	0	0
Story1	B125	125	Dead	Combination	17.6667	0	2	0	0	0
Story1	B125	125	Dead	Combination	19.5	0	6	0	0	0
Story1	B125	125	Dead	Combination	21.3333	0	10	0	0	0
Story1	B125	125	Dead	Combination	23.1667	0	14	0	0	0
Story1	B125	125	Dead	Combination	25	0	18	0	0	0
Story1	B126	128	Self Weight	LinStatic	0	5	0	0	0	0
Story1	B126	128	Self Weight	LinStatic	1	5	0	0	0	0
Story1	B126	128	Super Dead	LinStatic	0	1	0	0	0	0
Story1	B126	128	Super Dead	LinStatic	1	1	0	0	0	0
Story1	B126	128	Live	LinStatic	0	2	0	0	0	0
Story1	B126	128	Live	LinStatic	1	2	0	0	0	0
Story1	B126	128	EQX	LinStatic	0	-2	0	0	0	0
Story1	B126	128	EQX	LinStatic	1	-2	0	0	0	0
Story1	B126	128	EQY	LinStatic	0	10	0	0	0	0
Story1	B126	128	EQY	LinStatic	1	10	0	0	0	0
Story1	B126	128	Dead	Combination	0	6	0	0	0	0
Story1	B126	128	Dead	Combination	1	6	0	0	0	0
Story1	B127	129	Self Weight	LinStatic	0	0	0	0	0	0
Story1	B127	129	Self Weight	LinStatic	1	0	0	0	0	0
Story1	B127	129	Super Dead	LinStatic	0	0	0	0	0	0
Story1	B127	129	Super Dead	LinStatic	1	0	0	0	0	0
Story1	B127	129	Live	LinStatic	0	0	0	0	0	0
Story1	B127	129	Live	LinStatic	1	0	0	0	0	0
Story1	B127	129	EQX	LinStatic	0	0	0	0	0	0
Story1	B127	129	EQX	LinStatic	1	0	0	0	0	0
Story1	B127	129	EQY	LinStatic	0	0	0	0	0	0
Story1	B127	129	EQY	LinStatic	1	0	0	0	0	0
Story1	B127	129	Dead	Combination	0	0	0	0	0	0
Story1	B127	129	Dead	Combination	1	0	0	0	0	0
Story1	B128	130	Self Weight	LinStatic	0	0	0	0	0	0
Story1	B128	130	Self Weight	LinStatic	1	0	0	0	0	0
Story1	B128	130	Super Dead	LinStatic	0	0	0	0	0	0
Story1	B128	130	Super Dead	LinStatic	1	0	0	0	0	0
Story1	B128	130	Live	LinStatic	0	0	0	0	0	0
Story1	B128	130	Live	LinStatic	1	0	0	0	0	0
Story1	B128	130	EQX	LinStatic	0	0	0	0	0	0
Story1	B128	130	EQX	LinStatic	1	0	0	0	0	0
Story1	B128	130	EQY	LinStatic	0	0	0	0	0	0
Story1	B128	130	EQY	LinStatic	1	0	0	0	0	0
Story1	B128	130	Dead	Combination	0	0	0	0	0	0
Story1	B128	130	Dead	Combination	1	0	0	0	0	0
Story1	B129	131	Self Weight	LinStatic	0	4	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B129	131	Self Weight	LinStatic	1	4	0	0	0	0
Story1	B129	131	Super Dead	LinStatic	0	1	0	0	0	0
Story1	B129	131	Super Dead	LinStatic	1	1	0	0	0	0
Story1	B129	131	Live	LinStatic	0	2	0	0	0	0
Story1	B129	131	Live	LinStatic	1	2	0	0	0	0
Story1	B129	131	EQX	LinStatic	0	2	0	0	0	0
Story1	B129	131	EQX	LinStatic	1	2	0	0	0	0
Story1	B129	131	EQY	LinStatic	0	-10	0	0	0	0
Story1	B129	131	EQY	LinStatic	1	-10	0	0	0	0
Story1	B129	131	Dead	Combination	0	5	0	0	0	0
Story1	B129	131	Dead	Combination	1	5	0	0	0	0
Story1	B131	133	Self Weight	LinStatic	0	0	3	0	0	0
Story1	B131	133	Self Weight	LinStatic	1	0	3	0	0	0
Story1	B131	133	Super Dead	LinStatic	0	0	0.05109	0	0	0
Story1	B131	133	Super Dead	LinStatic	1	0	0.05109	0	0	0
Story1	B131	133	Live	LinStatic	0	0	0.08574	0	0	0
Story1	B131	133	Live	LinStatic	1	0	0.08574	0	0	0
Story1	B131	133	EQX	LinStatic	0	0	13	0	1.31E-05	0
Story1	B131	133	EQX	LinStatic	1	0	13	0	1.31E-05	0
Story1	B131	133	EQY	LinStatic	0	0	0.2448	0	-2.898E-06	0
Story1	B131	133	EQY	LinStatic	1	0	0.2448	0	-2.898E-06	0
Story1	B131	133	Dead	Combination	0	0	3	0	0	0
Story1	B131	133	Dead	Combination	1	0	3	0	0	0
Story1	B132	134	Self Weight	LinStatic	0	2	2	-1.763E-05	0	-8.859E-06
Story1	B132	134	Self Weight	LinStatic	1	2	2	-1.763E-05	0	8.775E-06
Story1	B132	134	Super Dead	LinStatic	0	0.04849	0.03448	1.031E-05	0	5.179E-06
Story1	B132	134	Super Dead	LinStatic	1	0.04849	0.03448	1.031E-05	0	-5.13E-06
Story1	B132	134	Live	LinStatic	0	0.0783	0.05785	1.439E-05	0	7.231E-06
Story1	B132	134	Live	LinStatic	1	0.0783	0.05785	1.439E-05	0	-7.163E-06
Story1	B132	134	EQX	LinStatic	0	-5	9	-0.0005261	8.292E-06	-0.0002643
Story1	B132	134	EQX	LinStatic	1	-5	9	-0.0005261	8.292E-06	0.0002618
Story1	B132	134	EQY	LinStatic	0	-0.08568	0.1639	0.0001164	-1.834E-06	5.845E-05
Story1	B132	134	EQY	LinStatic	1	-0.08568	0.1639	0.0001164	-1.834E-06	-5.791E-05
Story1	B132	134	Dead	Combination	0	2	2	-7.325E-06	0	-3.68E-06
Story1	B132	134	Dead	Combination	1	2	2	-7.325E-06	0	3.645E-06
Story1	B133	135	Self Weight	LinStatic	0	-0.3278	0	0	0	0
Story1	B133	135	Self Weight	LinStatic	1	-0.3278	0	0	0	0
Story1	B133	135	Super Dead	LinStatic	0	-0.006431	0	0	0	0
Story1	B133	135	Super Dead	LinStatic	1	-0.006431	0	0	0	0
Story1	B133	135	Live	LinStatic	0	-0.01061	0	0	0	0
Story1	B133	135	Live	LinStatic	1	-0.01061	0	0	0	0
Story1	B133	135	EQX	LinStatic	0	-1	0	0	0	0
Story1	B133	135	EQX	LinStatic	1	-1	0	0	0	0
Story1	B133	135	EQY	LinStatic	0	-0.01158	0	0	0	0
Story1	B133	135	EQY	LinStatic	1	-0.01158	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B133	135	Dead	Combination	0	-0.3342	0	0	0	0
Story1	B133	135	Dead	Combination	1	-0.3342	0	0	0	0
Story1	B134	136	Self Weight	LinStatic	0	-5	0	0	0	0
Story1	B134	136	Self Weight	LinStatic	1	-5	0	0	0	0
Story1	B134	136	Super Dead	LinStatic	0	-0.1218	0	0	0	0
Story1	B134	136	Super Dead	LinStatic	1	-0.1218	0	0	0	0
Story1	B134	136	Live	LinStatic	0	-0.1974	0	0	0	0
Story1	B134	136	Live	LinStatic	1	-0.1974	0	0	0	0
Story1	B134	136	EQX	LinStatic	0	8	0	0	0	0
Story1	B134	136	EQX	LinStatic	1	8	0	0	0	0
Story1	B134	136	EQY	LinStatic	0	0.1439	0	0	0	0
Story1	B134	136	EQY	LinStatic	1	0.1439	0	0	0	0
Story1	B134	136	Dead	Combination	0	-6	0	0	0	0
Story1	B134	136	Dead	Combination	1	-6	0	0	0	0
Story1	B135	137	Self Weight	LinStatic	0	-2	0	0	0	0
Story1	B135	137	Self Weight	LinStatic	1	-2	0	0	0	0
Story1	B135	137	Super Dead	LinStatic	0	-0.04988	0	0	0	0
Story1	B135	137	Super Dead	LinStatic	1	-0.04988	0	0	0	0
Story1	B135	137	Live	LinStatic	0	-0.08079	0	0	0	0
Story1	B135	137	Live	LinStatic	1	-0.08079	0	0	0	0
Story1	B135	137	EQX	LinStatic	0	3	0	0	0	0
Story1	B135	137	EQX	LinStatic	1	3	0	0	0	0
Story1	B135	137	EQY	LinStatic	0	0.06341	0	0	0	0
Story1	B135	137	EQY	LinStatic	1	0.06341	0	0	0	0
Story1	B135	137	Dead	Combination	0	-2	0	0	0	0
Story1	B135	137	Dead	Combination	1	-2	0	0	0	0
Story1	B136	138	Self Weight	LinStatic	0	2	0	0	0	0
Story1	B136	138	Self Weight	LinStatic	1	2	0	0	0	0
Story1	B136	138	Super Dead	LinStatic	0	0.0482	0	0	0	0
Story1	B136	138	Super Dead	LinStatic	1	0.0482	0	0	0	0
Story1	B136	138	Live	LinStatic	0	0.07923	0	0	0	0
Story1	B136	138	Live	LinStatic	1	0.07923	0	0	0	0
Story1	B136	138	EQX	LinStatic	0	3	0	0	0	0
Story1	B136	138	EQX	LinStatic	1	3	0	0	0	0
Story1	B136	138	EQY	LinStatic	0	0.05974	0	0	0	0
Story1	B136	138	EQY	LinStatic	1	0.05974	0	0	0	0
Story1	B136	138	Dead	Combination	0	2	0	0	0	0
Story1	B136	138	Dead	Combination	1	2	0	0	0	0
Story1	B137	139	Self Weight	LinStatic	0	-2	0	0	0	0
Story1	B137	139	Self Weight	LinStatic	1	-2	0	0	0	0
Story1	B137	139	Super Dead	LinStatic	0	-0.05049	0	0	0	0
Story1	B137	139	Super Dead	LinStatic	1	-0.05049	0	0	0	0
Story1	B137	139	Live	LinStatic	0	-0.08292	0	0	0	0
Story1	B137	139	Live	LinStatic	1	-0.08292	0	0	0	0
Story1	B137	139	EQX	LinStatic	0	-3	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B137	139	EQX	LinStatic	1	-3	0	0	0	0
Story1	B137	139	EQY	LinStatic	0	-0.05421	0	0	0	0
Story1	B137	139	EQY	LinStatic	1	-0.05421	0	0	0	0
Story1	B137	139	Dead	Combination	0	-3	0	0	0	0
Story1	B137	139	Dead	Combination	1	-3	0	0	0	0
Story1	B138	140	Self Weight	LinStatic	0	-8	0	0	0	0
Story1	B138	140	Self Weight	LinStatic	1	-8	0	0	0	0
Story1	B138	140	Super Dead	LinStatic	0	-0.1688	0	0	0	0
Story1	B138	140	Super Dead	LinStatic	1	-0.1688	0	0	0	0
Story1	B138	140	Live	LinStatic	0	-0.2753	0	0	0	0
Story1	B138	140	Live	LinStatic	1	-0.2753	0	0	0	0
Story1	B138	140	EQX	LinStatic	0	1	0	0	0	0
Story1	B138	140	EQX	LinStatic	1	1	0	0	0	0
Story1	B138	140	EQY	LinStatic	0	0.0143	0	0	0	0
Story1	B138	140	EQY	LinStatic	1	0.0143	0	0	0	0
Story1	B138	140	Dead	Combination	0	-8	0	0	0	0
Story1	B138	140	Dead	Combination	1	-8	0	0	0	0
Story1	B139	108	Self Weight	LinStatic	0	0	-5	0	0	0
Story1	B139	108	Self Weight	LinStatic	1.9	0	-3	0	0	0
Story1	B139	108	Self Weight	LinStatic	3.8	0	-1	0	0	0
Story1	B139	108	Self Weight	LinStatic	5.7	0	1	0	0	0
Story1	B139	108	Self Weight	LinStatic	7.6	0	3	0	0	0
Story1	B139	108	Self Weight	LinStatic	9.5	0	5	0	0	0
Story1	B139	108	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B139	108	Super Dead	LinStatic	1.9	0	-1	0	0	0
Story1	B139	108	Super Dead	LinStatic	3.8	0	-0.2137	0	0	0
Story1	B139	108	Super Dead	LinStatic	5.7	0	0.2137	0	0	0
Story1	B139	108	Super Dead	LinStatic	7.6	0	1	0	0	0
Story1	B139	108	Super Dead	LinStatic	9.5	0	1	0	0	0
Story1	B139	108	Live	LinStatic	0	0	-2	0	0	0
Story1	B139	108	Live	LinStatic	1.9	0	-1	0	0	0
Story1	B139	108	Live	LinStatic	3.8	0	-0.3088	0	0	0
Story1	B139	108	Live	LinStatic	5.7	0	0.3088	0	0	0
Story1	B139	108	Live	LinStatic	7.6	0	1	0	0	0
Story1	B139	108	Live	LinStatic	9.5	0	2	0	0	0
Story1	B139	108	EQX	LinStatic	0	0	0	0	0	0
Story1	B139	108	EQX	LinStatic	1.9	0	0	0	0	0
Story1	B139	108	EQX	LinStatic	3.8	0	0	0	0	0
Story1	B139	108	EQX	LinStatic	5.7	0	0	0	0	0
Story1	B139	108	EQX	LinStatic	7.6	0	0	0	0	0
Story1	B139	108	EQX	LinStatic	9.5	0	0	0	0	0
Story1	B139	108	EQY	LinStatic	0	0	0	0	0	0
Story1	B139	108	EQY	LinStatic	1.9	0	0	0	0	0
Story1	B139	108	EQY	LinStatic	3.8	0	0	0	0	0
Story1	B139	108	EQY	LinStatic	5.7	0	0	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B139	108	EQY	LinStatic	7.6	0	0	0	0	0
Story1	B139	108	EQY	LinStatic	9.5	0	0	0	0	0
Story1	B139	108	Dead	Combination	0	0	-6	0	0	0
Story1	B139	108	Dead	Combination	1.9	0	-3	0	0	0
Story1	B139	108	Dead	Combination	3.8	0	-1	0	0	0
Story1	B139	108	Dead	Combination	5.7	0	1	0	0	0
Story1	B139	108	Dead	Combination	7.6	0	3	0	0	0
Story1	B139	108	Dead	Combination	9.5	0	6	0	0	0
Story1	B140	109	Self Weight	LinStatic	0	0	-12	0	0	0
Story1	B140	109	Self Weight	LinStatic	2	0	-10	0	0	0
Story1	B140	109	Self Weight	LinStatic	4	0	-9	0	0	0
Story1	B140	109	Self Weight	LinStatic	6	0	-7	0	0	0
Story1	B140	109	Self Weight	LinStatic	8	0	-5	0	0	0
Story1	B140	109	Self Weight	LinStatic	10	0	-3	0	0	0
Story1	B140	109	Self Weight	LinStatic	12	0	-1	0	0	0
Story1	B140	109	Self Weight	LinStatic	14	0	1	0	0	0
Story1	B140	109	Self Weight	LinStatic	16	0	3	0	0	0
Story1	B140	109	Self Weight	LinStatic	18	0	5	0	0	0
Story1	B140	109	Self Weight	LinStatic	20	0	7	0	0	0
Story1	B140	109	Self Weight	LinStatic	22	0	9	0	0	0
Story1	B140	109	Self Weight	LinStatic	24	0	10	0	0	0
Story1	B140	109	Self Weight	LinStatic	26	0	12	0	0	0
Story1	B140	109	Super Dead	LinStatic	0	0	-3	0	0	0
Story1	B140	109	Super Dead	LinStatic	2	0	-2	0	0	0
Story1	B140	109	Super Dead	LinStatic	4	0	-2	0	0	0
Story1	B140	109	Super Dead	LinStatic	6	0	-2	0	0	0
Story1	B140	109	Super Dead	LinStatic	8	0	-1	0	0	0
Story1	B140	109	Super Dead	LinStatic	10	0	-1	0	0	0
Story1	B140	109	Super Dead	LinStatic	12	0	-0.2249	0	0	0
Story1	B140	109	Super Dead	LinStatic	14	0	0.2249	0	0	0
Story1	B140	109	Super Dead	LinStatic	16	0	1	0	0	0
Story1	B140	109	Super Dead	LinStatic	18	0	1	0	0	0
Story1	B140	109	Super Dead	LinStatic	20	0	2	0	0	0
Story1	B140	109	Super Dead	LinStatic	22	0	2	0	0	0
Story1	B140	109	Super Dead	LinStatic	24	0	2	0	0	0
Story1	B140	109	Super Dead	LinStatic	26	0	3	0	0	0
Story1	B140	109	Live	LinStatic	0	0	-4	0	0	0
Story1	B140	109	Live	LinStatic	2	0	-4	0	0	0
Story1	B140	109	Live	LinStatic	4	0	-3	0	0	0
Story1	B140	109	Live	LinStatic	6	0	-2	0	0	0
Story1	B140	109	Live	LinStatic	8	0	-2	0	0	0
Story1	B140	109	Live	LinStatic	10	0	-1	0	0	0
Story1	B140	109	Live	LinStatic	12	0	-0.325	0	0	0
Story1	B140	109	Live	LinStatic	14	0	0.325	0	0	0
Story1	B140	109	Live	LinStatic	16	0	1	0	0	0

Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B140	109	Live	LinStatic	18	0	2	0	0	0
Story1	B140	109	Live	LinStatic	20	0	2	0	0	0
Story1	B140	109	Live	LinStatic	22	0	3	0	0	0
Story1	B140	109	Live	LinStatic	24	0	4	0	0	0
Story1	B140	109	Live	LinStatic	26	0	4	0	0	0
Story1	B140	109	EQX	LinStatic	0	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	2	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	4	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	6	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	8	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	10	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	12	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	14	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	16	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	18	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	20	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	22	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	24	0	0	0	0	0
Story1	B140	109	EQX	LinStatic	26	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	0	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	2	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	4	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	6	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	8	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	10	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	12	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	14	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	16	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	18	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	20	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	22	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	24	0	0	0	0	0
Story1	B140	109	EQY	LinStatic	26	0	0	0	0	0
Story1	B140	109	Dead	Combination	0	0	-15	0	0	0
Story1	B140	109	Dead	Combination	2	0	-13	0	0	0
Story1	B140	109	Dead	Combination	4	0	-11	0	0	0
Story1	B140	109	Dead	Combination	6	0	-8	0	0	0
Story1	B140	109	Dead	Combination	8	0	-6	0	0	0
Story1	B140	109	Dead	Combination	10	0	-4	0	0	0
Story1	B140	109	Dead	Combination	12	0	-1	0	0	0
Story1	B140	109	Dead	Combination	14	0	1	0	0	0
Story1	B140	109	Dead	Combination	16	0	4	0	0	0
Story1	B140	109	Dead	Combination	18	0	6	0	0	0
Story1	B140	109	Dead	Combination	20	0	8	0	0	0
Story1	B140	109	Dead	Combination	22	0	11	0	0	0

**Table 5.5 - Element Forces - Beams (Part 1 of 2, continued)**

Story	Beam	Unique Name	Output Case	Case Type	Station ft	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft
Story1	B140	109	Dead	Combination	24	0	13	0	0	0
Story1	B140	109	Dead	Combination	26	0	15	0	0	0
Story1	B141	110	Self Weight	LinStatic	0	0	-5	0	0	0
Story1	B141	110	Self Weight	LinStatic	1.9	0	-3	0	0	0
Story1	B141	110	Self Weight	LinStatic	3.8	0	-1	0	0	0
Story1	B141	110	Self Weight	LinStatic	5.7	0	1	0	0	0
Story1	B141	110	Self Weight	LinStatic	7.6	0	3	0	0	0
Story1	B141	110	Self Weight	LinStatic	9.5	0	5	0	0	0
Story1	B141	110	Super Dead	LinStatic	0	0	-1	0	0	0
Story1	B141	110	Super Dead	LinStatic	1.9	0	-1	0	0	0
Story1	B141	110	Super Dead	LinStatic	3.8	0	-0.2137	0	0	0
Story1	B141	110	Super Dead	LinStatic	5.7	0	0.2137	0	0	0
Story1	B141	110	Super Dead	LinStatic	7.6	0	1	0	0	0
Story1	B141	110	Super Dead	LinStatic	9.5	0	1	0	0	0
Story1	B141	110	Live	LinStatic	0	0	-2	0	0	0
Story1	B141	110	Live	LinStatic	1.9	0	-1	0	0	0
Story1	B141	110	Live	LinStatic	3.8	0	-0.3088	0	0	0
Story1	B141	110	Live	LinStatic	5.7	0	0.3088	0	0	0
Story1	B141	110	Live	LinStatic	7.6	0	1	0	0	0
Story1	B141	110	Live	LinStatic	9.5	0	2	0	0	0
Story1	B141	110	EQX	LinStatic	0	0	0	0	0	0
Story1	B141	110	EQX	LinStatic	1.9	0	0	0	0	0
Story1	B141	110	EQX	LinStatic	3.8	0	0	0	0	0
Story1	B141	110	EQX	LinStatic	5.7	0	0	0	0	0
Story1	B141	110	EQX	LinStatic	7.6	0	0	0	0	0
Story1	B141	110	EQX	LinStatic	9.5	0	0	0	0	0
Story1	B141	110	EQY	LinStatic	0	0	0	0	0	0
Story1	B141	110	EQY	LinStatic	1.9	0	0	0	0	0
Story1	B141	110	EQY	LinStatic	3.8	0	0	0	0	0
Story1	B141	110	EQY	LinStatic	5.7	0	0	0	0	0
Story1	B141	110	EQY	LinStatic	7.6	0	0	0	0	0
Story1	B141	110	EQY	LinStatic	9.5	0	0	0	0	0
Story1	B141	110	Dead	Combination	0	0	-6	0	0	0
Story1	B141	110	Dead	Combination	1.9	0	-3	0	0	0
Story1	B141	110	Dead	Combination	3.8	0	-1	0	0	0
Story1	B141	110	Dead	Combination	5.7	0	1	0	0	0
Story1	B141	110	Dead	Combination	7.6	0	3	0	0	0
Story1	B141	110	Dead	Combination	9.5	0	6	0	0	0



**Table 5.5 - Element Forces - Beams (Part 2 of 2)**

M3 kip-ft	Element	Elem Station ft	Location
0	1	0	
0.4809	1	1	
0	1	0	
-0.2737	1	1	
0	1	0	
-0.3821	1	1	
0	1	0	
-10	1	1	
0	1	0	
-1	1	1	
0	1	0	
0.2072	1	1	
0	2	0	
2	2	1	
0	2	0	
-0.2411	2	1	
0	2	0	
-0.3309	2	1	
0	2	0	
-9	2	1	
0	2	0	
-1	2	1	
0	2	0	
1	2	1	
0	3	0	
3	3	1	
0	3	0	
-0.2136	3	1	
0	3	0	
-0.2854	3	1	
0	3	0	
-9	3	1	
0	3	0	
-0.497	3	1	
0	3	0	
3	3	1	
0	5	0	
0.3944	5	1	
0	5	0	
-0.05181	5	1	
0	5	0	
-0.07086	5	1	
0	5	0	
-10	5	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	5	0	
0.1249	5	1	
0	5	0	
0.3426	5	1	
0	6	0	
1	6	1	
0	6	0	
-0.06043	6	1	
0	6	0	
-0.0824	6	1	
0	6	0	
-9	6	1	
0	6	0	
0.06651	6	1	
0	6	0	
0.4533	6	1	
0	7	0	
1	7	1	
0	7	0	
-0.0664	7	1	
0	7	0	
-0.08907	7	1	
0	7	0	
-8	7	1	
0	7	0	
0.004439	7	1	
0	7	0	
1	7	1	
0	10	0	
0.09947	10	1	
0	10	0	
0.07693	10	1	
0	10	0	
0.1085	10	1	
0	10	0	
-11	10	1	
0	10	0	
1	10	1	
0	10	0	
0.1764	10	1	
0	11	0	
-0.013	11	1	
0	11	0	
0.07015	11	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	11	0	
0.09845	11	1	
0	11	0	
-11	11	1	
0	11	0	
1	11	1	
0	11	0	
0.05715	11	1	
0	12	0	
0.115	12	1	
0	12	0	
0.0687	12	1	
0	12	0	
0.09703	12	1	
0	12	0	
-10	12	1	
0	12	0	
1	12	1	
0	12	0	
0.1837	12	1	
0	13	0	
-0.01928	13	1	
0	13	0	
0.09625	13	1	
0	13	0	
0.1351	13	1	
0	13	0	
-15	13	1	
0	13	0	
1	13	1	
0	13	0	
0.07697	13	1	
0	14	0	
-0.01036	14	1	
0	14	0	
0.09024	14	1	
0	14	0	
0.1267	14	1	
0	14	0	
-14	14	1	
0	14	0	
1	14	1	
0	14	0	
0.07988	14	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	15	0	
0.2357	15	1	
0	15	0	
0.09017	15	1	
0	15	0	
0.1278	15	1	
0	15	0	
-13	15	1	
0	15	0	
1	15	1	
0	15	0	
0.3259	15	1	
0	16	0	
0.2973	16	1	
0	16	0	
0.08103	16	1	
0	16	0	
0.1152	16	1	
0	16	0	
-11	16	1	
0	16	0	
1	16	1	
0	16	0	
0.3783	16	1	
0	17	0	
0.02909	17	1	
0	17	0	
0.07076	17	1	
0	17	0	
0.09952	17	1	
0	17	0	
-11	17	1	
0	17	0	
1	17	1	
0	17	0	
0.09985	17	1	
0	18	0	
0.01834	18	1	
0	18	0	
0.06691	18	1	
0	18	0	
0.09406	18	1	
0	18	0	
-10	18	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	18	0	
1	18	1	
0	18	0	
0.08526	18	1	
0	73	0	
0.4314	73	1	
0	73	0	
0.08469	73	1	
0	73	0	
0.121	73	1	
0	73	0	
-1	73	1	
0	73	0	
-7	73	1	
0	73	0	
1	73	1	
0	74	0	
2	74	1	
0	74	0	
0.3117	74	1	
0	74	0	
0.4488	74	1	
0	74	0	
-1	74	1	
0	74	0	
-9	74	1	
0	74	0	
3	74	1	
0	75	0	
5	75	1	
0	75	0	
1	75	1	
0	75	0	
1	75	1	
0	75	0	
-2	75	1	
0	75	0	
-11	75	1	
0	75	0	
5	75	1	
0	76	0	
0.05607	76	1	
0	76	0	
0.08876	76	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	76	0	
0.1249	76	1	
0	76	0	
-3	76	1	
0	76	0	
-18	76	1	
0	76	0	
0.1448	76	1	
0	77	0	
0.09564	77	1	
0	77	0	
0.08968	77	1	
0	77	0	
0.1264	77	1	
0	77	0	
-2	77	1	
0	77	0	
-17	77	1	
0	77	0	
0.1853	77	1	
0	78	0	
0.39	78	1	
0	78	0	
0.1213	78	1	
0	78	0	
0.1722	78	1	
0	78	0	
-2	78	1	
0	78	0	
-16	78	1	
0	78	0	
1	78	1	
0	79	0	
-1	79	1	
0	79	0	
0.01067	79	1	
0	79	0	
0.01158	79	1	
0	79	0	
-3	79	1	
0	79	0	
-20	79	1	
0	79	0	
-1	79	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	80	0	
-1	80	1	
0	80	0	
0.009831	80	1	
0	80	0	
0.01051	80	1	
0	80	0	
-3	80	1	
0	80	0	
-20	80	1	
0	80	0	
-1	80	1	
0	81	0	
-0.4288	81	1	
0	81	0	
0.03786	81	1	
0	81	0	
0.05112	81	1	
0	81	0	
-3	81	1	
0	81	0	
-19	81	1	
0	81	0	
-0.391	81	1	
0	83	0	
-1	83	1	
0	83	0	
-0.02319	83	1	
0	83	0	
-0.03716	83	1	
0	83	0	
-3	83	1	
0	83	0	
-19	83	1	
0	83	0	
-1	83	1	
0	84	0	
-1	84	1	
0	84	0	
-0.02312	84	1	
0	84	0	
-0.0369	84	1	
0	84	0	
-3	84	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	84	0	
-19	84	1	
0	84	0	
-1	84	1	
0	85	0	
-1	85	1	
0	85	0	
0.005068	85	1	
0	85	0	
0.003944	85	1	
0	85	0	
-3	85	1	
0	85	0	
-18	85	1	
0	85	0	
-1	85	1	
0	86	0	
-1	86	1	
0	86	0	
-0.02298	86	1	
0	86	0	
-0.03576	86	1	
0	86	0	
-2	86	1	
0	86	0	
-14	86	1	
0	86	0	
-1	86	1	
0	87	0	
-1	87	1	
0	87	0	
-0.02732	87	1	
0	87	0	
-0.04192	87	1	
0	87	0	
-2	87	1	
0	87	0	
-13	87	1	
0	87	0	
-1	87	1	
0	88	0	
-1	88	1	
0	88	0	
-0.003287	88	1	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	88	0	
-0.007108	88	1	
0	88	0	
-2	88	1	
0	88	0	
-13	88	1	
0	88	0	
-1	88	1	
0	43	0	
-0.4974	43	1	
0	43	0	
-0.09542	43	1	
0	43	0	
-0.1364	43	1	
0	43	0	
2	43	1	
0	43	0	
-13	43	1	
0	43	0	
-1	43	1	
0	44	0	
-0.004769	44	1	
0	44	0	
-0.03553	44	1	
0	44	0	
-0.04989	44	1	
0	44	0	
2	44	1	
0	44	0	
-13	44	1	
0	44	0	
-0.04029	44	1	
0	45	0	
1	45	1	
0	45	0	
0.05532	45	1	
0	45	0	
0.08132	45	1	
0	45	0	
2	45	1	
0	45	0	
-12	45	1	
0	45	0	
1	45	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	46	0	
-0.4747	46	1	
0	46	0	
-0.1052	46	1	
0	46	0	
-0.1501	46	1	
0	46	0	
3	46	1	
0	46	0	
-17	46	1	
0	46	0	
-1	46	1	
0	47	0	
-0.4199	47	1	
0	47	0	
-0.09402	47	1	
0	47	0	
-0.134	47	1	
0	47	0	
3	47	1	
0	47	0	
-16	47	1	
0	47	0	
-1	47	1	
0	48	0	
-0.1388	48	1	
0	48	0	
-0.05655	48	1	
0	48	0	
-0.07996	48	1	
0	48	0	
3	48	1	
0	48	0	
-15	48	1	
0	48	0	
-0.1953	48	1	
0	49	0	
1	49	1	
0	49	0	
0.03955	49	1	
0	49	0	
0.0587	49	1	
0	49	0	
2	49	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	49	0	
-13	49	1	
0	49	0	
1	49	1	
0	50	0	
0.4028	50	1	
0	50	0	
0.01605	50	1	
0	50	0	
0.02464	50	1	
0	50	0	
2	50	1	
0	50	0	
-13	50	1	
0	50	0	
0.4189	50	1	
0	51	0	
1	51	1	
0	51	0	
0.03094	51	1	
0	51	0	
0.04609	51	1	
0	51	0	
2	51	1	
0	51	0	
-12	51	1	
0	51	0	
1	51	1	
0	52	0	
-1	52	1	
0	52	0	
-0.2008	52	1	
0	52	0	
-0.2888	52	1	
0	52	0	
2	52	1	
0	52	0	
-12	52	1	
0	52	0	
-2	52	1	
0	53	0	
-1	53	1	
0	53	0	
-0.1256	53	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	53	0	
-0.1802	53	1	
0	53	0	
2	53	1	
0	53	0	
-11	53	1	
0	53	0	
-1	53	1	
0	54	0	
-0.004015	54	1	
0	54	0	
-0.02678	54	1	
0	54	0	
-0.03749	54	1	
0	54	0	
2	54	1	
0	54	0	
-10	54	1	
0	54	0	
-0.03079	54	1	
0	55	0	
1	55	1	
0	55	0	
0.0383	55	1	
0	55	0	
0.05699	55	1	
0	55	0	
2	55	1	
0	55	0	
-14	55	1	
0	55	0	
1	55	1	
0	56	0	
1	56	1	
0	56	0	
0.1378	56	1	
0	56	0	
0.2006	56	1	
0	56	0	
2	56	1	
0	56	0	
-13	56	1	
0	56	0	
2	56	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	57	0	
3	57	1	
0	57	0	
0.3145	57	1	
0	57	0	
0.4558	57	1	
0	57	0	
2	57	1	
0	57	0	
-11	57	1	
0	57	0	
3	57	1	
0	31	0	
0.1774	31	1	
0	31	0	
0.00822	31	1	
0	31	0	
0.0124	31	1	
0	31	0	
-6	31	1	
0	31	0	
-0.105	31	1	
0	31	0	
0.1856	31	1	
0	32	0	
1	32	1	
0	32	0	
0.03235	32	1	
0	32	0	
0.05173	32	1	
0	32	0	
-6	32	1	
0	32	0	
-0.1094	32	1	
0	32	0	
1	32	1	
0	33	0	
3	33	1	
0	33	0	
0.06298	33	1	
0	33	0	
0.1016	33	1	
0	33	0	
-6	33	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	33	0	
-0.1162	33	1	
0	33	0	
3	33	1	
0	34	0	
1	34	1	
0	34	0	
0.02235	34	1	
0	34	0	
0.03449	34	1	
0	34	0	
-11	34	1	
0	34	0	
-0.2052	34	1	
0	34	0	
1	34	1	
0	35	0	
1	35	1	
0	35	0	
0.02221	35	1	
0	35	0	
0.03435	35	1	
0	35	0	
-10	35	1	
0	35	0	
-0.1948	35	1	
0	35	0	
1	35	1	
0	36	0	
1	36	1	
0	36	0	
0.02743	36	1	
0	36	0	
0.04295	36	1	
0	36	0	
-10	36	1	
0	36	0	
-0.1859	36	1	
0	36	0	
1	36	1	
0	37	0	
0.3946	37	1	
0	37	0	
0.01762	37	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	37	0	
0.02664	37	1	
0	37	0	
-12	37	1	
0	37	0	
-0.2178	37	1	
0	37	0	
0.4122	37	1	
0	38	0	
0.3622	38	1	
0	38	0	
0.01643	38	1	
0	38	0	
0.02482	38	1	
0	38	0	
-11	38	1	
0	38	0	
-0.206	38	1	
0	38	0	
0.3787	38	1	
0	39	0	
1	39	1	
0	39	0	
0.02051	39	1	
0	39	0	
0.03157	39	1	
0	39	0	
-11	39	1	
0	39	0	
-0.1967	39	1	
0	39	0	
1	39	1	
0	40	0	
0.2572	40	1	
0	40	0	
0.01199	40	1	
0	40	0	
0.01807	40	1	
0	40	0	
-8	40	1	
0	40	0	
-0.1537	40	1	
0	40	0	
0.2692	40	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	41	0	
0.1685	41	1	
0	41	0	
0.009925	41	1	
0	41	0	
0.01475	41	1	
0	41	0	
-8	41	1	
0	41	0	
-0.1494	41	1	
0	41	0	
0.1785	41	1	
0	42	0	
0.3283	42	1	
0	42	0	
0.01319	42	1	
0	42	0	
0.02011	42	1	
0	42	0	
-8	42	1	
0	42	0	
-0.1469	42	1	
0	42	0	
0.3415	42	1	
0	58	0	
0.03855	58	1	
0	58	0	
0.00753	58	1	
0	58	0	
0.01076	58	1	
0	58	0	
-8	58	1	
0	58	0	
-0.1576	58	1	
0	58	0	
0.04608	58	1	
0	59	0	
0.04728	59	1	
0	59	0	
0.007503	59	1	
0	59	0	
0.01076	59	1	
0	59	0	
-8	59	1	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	59	0	
-0.1526	59	1	
0	59	0	
0.05478	59	1	
0	60	0	
0.3023	60	1	
0	60	0	
0.01268	60	1	
0	60	0	
0.01926	60	1	
0	60	0	
-8	60	1	
0	60	0	
-0.1478	60	1	
0	60	0	
0.3149	60	1	
0	61	0	
1	61	1	
0	61	0	
0.03487	61	1	
0	61	0	
0.05477	61	1	
0	61	0	
-12	61	1	
0	61	0	
-0.2194	61	1	
0	61	0	
1	61	1	
0	62	0	
1	62	1	
0	62	0	
0.01953	62	1	
0	62	0	
0.03002	62	1	
0	62	0	
-10	62	1	
0	62	0	
-0.1911	62	1	
0	62	0	
1	62	1	
0	63	0	
-1	63	1	
0	63	0	
-0.01829	63	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	63	0	
-0.03207	63	1	
0	63	0	
-12	63	1	
0	63	0	
-0.2304	63	1	
0	63	0	
-1	63	1	
0	64	0	
-1	64	1	
0	64	0	
-0.01741	64	1	
0	64	0	
-0.03047	64	1	
0	64	0	
-11	64	1	
0	64	0	
-0.2133	64	1	
0	64	0	
-1	64	1	
0	65	0	
-0.4097	65	1	
0	65	0	
0.0009536	65	1	
0	65	0	
-0.0006297	65	1	
0	65	0	
-12	65	1	
0	65	0	
-0.2255	65	1	
0	65	0	
-0.4087	65	1	
0	66	0	
1	66	1	
0	66	0	
0.02563	66	1	
0	66	0	
0.03939	66	1	
0	66	0	
-13	66	1	
0	66	0	
-0.2505	66	1	
0	66	0	
1	66	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	67	0	
-1	67	1	
0	67	0	
-0.00275	67	1	
0	67	0	
-0.006558	67	1	
0	67	0	
-11	67	1	
0	67	0	
-0.2136	67	1	
0	67	0	
-1	67	1	
0	68	0	
-1	68	1	
0	68	0	
-0.004507	68	1	
0	68	0	
-0.009329	68	1	
0	68	0	
-11	68	1	
0	68	0	
-0.2036	68	1	
0	68	0	
-1	68	1	
0	69	0	
-0.4437	69	1	
0	69	0	
-0.001008	69	1	
0	69	0	
-0.003548	69	1	
0	69	0	
-10	69	1	
0	69	0	
-0.1963	69	1	
0	69	0	
-0.4447	69	1	
0	70	0	
-0.0542	70	1	
0	70	0	
0.003417	70	1	
0	70	0	
0.004538	70	1	
0	70	0	
-6	70	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	70	0	
-0.1071	70	1	
0	70	0	
-0.05079	70	1	
0	71	0	
-1	71	1	
0	71	0	
-0.0216	71	1	
0	71	0	
-0.03633	71	1	
0	71	0	
-6	71	1	
0	71	0	
-0.1114	71	1	
0	71	0	
-1	71	1	
0	72	0	
-3	72	1	
0	72	0	
-0.04787	72	1	
0	72	0	
-0.07929	72	1	
0	72	0	
-6	72	1	
0	72	0	
-0.1213	72	1	
0	72	0	
-3	72	1	
0	4-1	0	
12	4-1	1.8	
18	4-1	3.6	
18	4-1	5.4	
12	4-1	7.2	
0	4-1	9	
0	4-2	0	
0	4-2	1	
0	4-3	0	
42	4-3	1.9231	
77	4-3	3.8462	
106	4-3	5.7692	
127	4-3	7.6923	
141	4-3	9.6154	
148	4-3	11.5385	
148	4-3	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
141	4-3	15.3846	
127	4-3	17.3077	
106	4-3	19.2308	
77	4-3	21.1539	
42	4-3	23.0769	
0	4-3	25	
0	4-1	0	
1	4-1	1.8	
2	4-1	3.6	
2	4-1	5.4	
1	4-1	7.2	
0	4-1	9	
0	4-2	0	
0	4-2	1	
0	4-3	0	
5	4-3	1.9231	
9	4-3	3.8462	
12	4-3	5.7692	
15	4-3	7.6923	
17	4-3	9.6154	
17	4-3	11.5385	
17	4-3	13.4615	
17	4-3	15.3846	
15	4-3	17.3077	
12	4-3	19.2308	
9	4-3	21.1539	
5	4-3	23.0769	
0	4-3	25	
0	4-1	0	
2	4-1	1.8	
3	4-1	3.6	
3	4-1	5.4	
2	4-1	7.2	
0	4-1	9	
0	4-2	0	
0	4-2	1	
0	4-3	0	
7	4-3	1.9231	
13	4-3	3.8462	
18	4-3	5.7692	
22	4-3	7.6923	
24	4-3	9.6154	
25	4-3	11.5385	
25	4-3	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
24	4-3	15.3846	
22	4-3	17.3077	
18	4-3	19.2308	
13	4-3	21.1539	
7	4-3	23.0769	
0	4-3	25	
0	4-1	0	
0	4-1	1.8	
0	4-1	3.6	
0	4-1	5.4	
0	4-1	7.2	
0	4-1	9	
0	4-2	0	
0	4-2	1	
0	4-3	0	
0	4-3	1.9231	
0	4-3	3.8462	
0	4-3	5.7692	
0	4-3	7.6923	
0	4-3	9.6154	
0	4-3	11.5385	
0	4-3	13.4615	
0	4-3	15.3846	
0	4-3	17.3077	
0	4-3	19.2308	
0	4-3	21.1539	
0	4-3	23.0769	
0	4-3	25	
0	4-1	0	
0	4-1	1.8	
0	4-1	3.6	
0	4-1	5.4	
0	4-1	7.2	
0	4-1	9	
0	4-2	0	
0	4-2	1	
0	4-3	0	
0	4-3	1.9231	
0	4-3	3.8462	
0	4-3	5.7692	
0	4-3	7.6923	
0	4-3	9.6154	
0	4-3	11.5385	
0	4-3	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	4-3	15.3846	
0	4-3	17.3077	
0	4-3	19.2308	
0	4-3	21.1539	
0	4-3	23.0769	
0	4-3	25	
0	4-1	0	
14	4-1	1.8	
21	4-1	3.6	
21	4-1	5.4	
14	4-1	7.2	
0	4-1	9	
0	4-2	0	
0	4-2	1	
0	4-3	0	
47	4-3	1.9231	
87	4-3	3.8462	
118	4-3	5.7692	
142	4-3	7.6923	
157	4-3	9.6154	
165	4-3	11.5385	
165	4-3	13.4615	
157	4-3	15.3846	
142	4-3	17.3077	
118	4-3	19.2308	
87	4-3	21.1539	
47	4-3	23.0769	
0	4-3	25	
0	8	0	
42	8	1.9231	
77	8	3.8462	
106	8	5.7692	
127	8	7.6923	
141	8	9.6154	
148	8	11.5385	
148	8	13.4615	
141	8	15.3846	
127	8	17.3077	
106	8	19.2308	
77	8	21.1539	
42	8	23.0769	
0	8	25	
0	8	0	
5	8	1.9231	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
9	8	3.8462	
12	8	5.7692	
15	8	7.6923	
17	8	9.6154	
17	8	11.5385	
17	8	13.4615	
17	8	15.3846	
15	8	17.3077	
12	8	19.2308	
9	8	21.1539	
5	8	23.0769	
0	8	25	
0	8	0	
7	8	1.9231	
13	8	3.8462	
18	8	5.7692	
22	8	7.6923	
24	8	9.6154	
25	8	11.5385	
25	8	13.4615	
24	8	15.3846	
22	8	17.3077	
18	8	19.2308	
13	8	21.1539	
7	8	23.0769	
0	8	25	
0	8	0	
0	8	1.9231	
0	8	3.8462	
0	8	5.7692	
0	8	7.6923	
0	8	9.6154	
0	8	11.5385	
0	8	13.4615	
0	8	15.3846	
0	8	17.3077	
0	8	19.2308	
0	8	21.1539	
0	8	23.0769	
0	8	25	
0	8	0	
0	8	1.9231	
0	8	3.8462	
0	8	5.7692	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	8	7.6923	
0	8	9.6154	
0	8	11.5385	
0	8	13.4615	
0	8	15.3846	
0	8	17.3077	
0	8	19.2308	
0	8	21.1539	
0	8	23.0769	
0	8	25	
0	8	0	
47	8	1.9231	
87	8	3.8462	
118	8	5.7692	
142	8	7.6923	
157	8	9.6154	
165	8	11.5385	
165	8	13.4615	
157	8	15.3846	
142	8	17.3077	
118	8	19.2308	
87	8	21.1539	
47	8	23.0769	
0	8	25	
0	9	0	
42	9	1.9231	
77	9	3.8462	
106	9	5.7692	
127	9	7.6923	
141	9	9.6154	
148	9	11.5385	
148	9	13.4615	
141	9	15.3846	
127	9	17.3077	
106	9	19.2308	
77	9	21.1539	
42	9	23.0769	
0	9	25	
0	9	0	
5	9	1.9231	
9	9	3.8462	
12	9	5.7692	
15	9	7.6923	
17	9	9.6154	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
17	9	11.5385	
17	9	13.4615	
17	9	15.3846	
15	9	17.3077	
12	9	19.2308	
9	9	21.1539	
5	9	23.0769	
0	9	25	
0	9	0	
7	9	1.9231	
13	9	3.8462	
18	9	5.7692	
22	9	7.6923	
24	9	9.6154	
25	9	11.5385	
25	9	13.4615	
24	9	15.3846	
22	9	17.3077	
18	9	19.2308	
13	9	21.1539	
7	9	23.0769	
0	9	25	
0	9	0	
0	9	1.9231	
0	9	3.8462	
0	9	5.7692	
0	9	7.6923	
0	9	9.6154	
0	9	11.5385	
0	9	13.4615	
0	9	15.3846	
0	9	17.3077	
0	9	19.2308	
0	9	21.1539	
0	9	23.0769	
0	9	25	
0	9	0	
0	9	1.9231	
0	9	3.8462	
0	9	5.7692	
0	9	7.6923	
0	9	9.6154	
0	9	11.5385	
0	9	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	9	15.3846	
0	9	17.3077	
0	9	19.2308	
0	9	21.1539	
0	9	23.0769	
0	9	25	
0	9	0	
47	9	1.9231	
87	9	3.8462	
118	9	5.7692	
142	9	7.6923	
157	9	9.6154	
165	9	11.5385	
165	9	13.4615	
157	9	15.3846	
142	9	17.3077	
118	9	19.2308	
87	9	21.1539	
47	9	23.0769	
0	9	25	
0	19	0	
42	19	1.9231	
77	19	3.8462	
106	19	5.7692	
127	19	7.6923	
141	19	9.6154	
148	19	11.5385	
148	19	13.4615	
141	19	15.3846	
127	19	17.3077	
106	19	19.2308	
77	19	21.1539	
42	19	23.0769	
0	19	25	
0	19	0	
5	19	1.9231	
9	19	3.8462	
12	19	5.7692	
15	19	7.6923	
17	19	9.6154	
17	19	11.5385	
17	19	13.4615	
17	19	15.3846	
15	19	17.3077	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
12	19	19.2308	
9	19	21.1539	
5	19	23.0769	
0	19	25	
0	19	0	
7	19	1.9231	
13	19	3.8462	
18	19	5.7692	
22	19	7.6923	
24	19	9.6154	
25	19	11.5385	
25	19	13.4615	
24	19	15.3846	
22	19	17.3077	
18	19	19.2308	
13	19	21.1539	
7	19	23.0769	
0	19	25	
0	19	0	
0	19	1.9231	
0	19	3.8462	
0	19	5.7692	
0	19	7.6923	
0	19	9.6154	
0	19	11.5385	
0	19	13.4615	
0	19	15.3846	
0	19	17.3077	
0	19	19.2308	
0	19	21.1539	
0	19	23.0769	
0	19	25	
0	19	0	
0	19	1.9231	
0	19	3.8462	
0	19	5.7692	
0	19	7.6923	
0	19	9.6154	
0	19	11.5385	
0	19	13.4615	
0	19	15.3846	
0	19	17.3077	
0	19	19.2308	
0	19	21.1539	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	19	23.0769	
0	19	25	
0	19	0	
47	19	1.9231	
87	19	3.8462	
118	19	5.7692	
142	19	7.6923	
157	19	9.6154	
165	19	11.5385	
165	19	13.4615	
157	19	15.3846	
142	19	17.3077	
118	19	19.2308	
87	19	21.1539	
47	19	23.0769	
0	19	25	
0	20	0	
42	20	1.9231	
77	20	3.8462	
106	20	5.7692	
127	20	7.6923	
141	20	9.6154	
148	20	11.5385	
148	20	13.4615	
141	20	15.3846	
127	20	17.3077	
106	20	19.2308	
77	20	21.1538	
42	20	23.0769	
0	20	25	
0	20	0	
5	20	1.9231	
9	20	3.8462	
12	20	5.7692	
15	20	7.6923	
17	20	9.6154	
17	20	11.5385	
17	20	13.4615	
17	20	15.3846	
15	20	17.3077	
12	20	19.2308	
9	20	21.1538	
5	20	23.0769	
0	20	25	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	20	0	
7	20	1.9231	
13	20	3.8462	
18	20	5.7692	
22	20	7.6923	
24	20	9.6154	
25	20	11.5385	
25	20	13.4615	
24	20	15.3846	
22	20	17.3077	
18	20	19.2308	
13	20	21.1538	
7	20	23.0769	
0	20	25	
0	20	0	
0	20	1.9231	
0	20	3.8462	
0	20	5.7692	
0	20	7.6923	
0	20	9.6154	
0	20	11.5385	
0	20	13.4615	
0	20	15.3846	
0	20	17.3077	
0	20	19.2308	
0	20	21.1538	
0	20	23.0769	
0	20	25	
0	20	0	
0	20	1.9231	
0	20	3.8462	
0	20	5.7692	
0	20	7.6923	
0	20	9.6154	
0	20	11.5385	
0	20	13.4615	
0	20	15.3846	
0	20	17.3077	
0	20	19.2308	
0	20	21.1538	
0	20	23.0769	
0	20	25	
0	20	0	
47	20	1.9231	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
87	20	3.8462	
118	20	5.7692	
142	20	7.6923	
157	20	9.6154	
165	20	11.5385	
165	20	13.4615	
157	20	15.3846	
142	20	17.3077	
118	20	19.2308	
87	20	21.1538	
47	20	23.0769	
0	20	25	
0	22	0	
42	22	2	
76	22	4	
103	22	6	
122	22	8	
133	22	10	
137	22	12	
133	22	14	
122	22	16	
103	22	18	
76	22	20	
42	22	22	
0	22	24	
0	22	0	
5	22	2	
9	22	4	
12	22	6	
14	22	8	
16	22	10	
16	22	12	
16	22	14	
14	22	16	
12	22	18	
9	22	20	
5	22	22	
0	22	24	
0	22	0	
7	22	2	
13	22	4	
18	22	6	
21	22	8	
23	22	10	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
23	22	12	
23	22	14	
21	22	16	
18	22	18	
13	22	20	
7	22	22	
0	22	24	
0	22	0	
0	22	2	
0	22	4	
0	22	6	
0	22	8	
0	22	10	
0	22	12	
0	22	14	
0	22	16	
0	22	18	
0	22	20	
0	22	22	
0	22	24	
0	22	0	
0	22	2	
0	22	4	
0	22	6	
0	22	8	
0	22	10	
0	22	12	
0	22	14	
0	22	16	
0	22	18	
0	22	20	
0	22	22	
0	22	24	
0	22	0	
0	22	2	
0	22	4	
0	22	6	
0	22	8	
0	22	10	
0	22	12	
0	22	14	
0	22	16	
0	22	18	
0	22	20	
0	22	22	
0	22	24	
0	22	0	
47	22	2	
85	22	4	
115	22	6	
136	22	8	
149	22	10	
153	22	12	
149	22	14	
136	22	16	
115	22	18	
85	22	20	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
47	22	22	
0	22	24	
0	23	0	
46	23	2	
84	23	4	
114	23	6	
137	23	8	
152	23	10	
160	23	12	
160	23	14	
152	23	16	
137	23	18	
114	23	20	
84	23	22	
46	23	24	
0	23	26	
0	23	0	
5	23	2	
10	23	4	
13	23	6	
16	23	8	
18	23	10	
19	23	12	
19	23	14	
18	23	16	
16	23	18	
13	23	20	
10	23	22	
5	23	24	
0	23	26	
0	23	0	
8	23	2	
14	23	4	
20	23	6	
23	23	8	
26	23	10	
27	23	12	
27	23	14	
26	23	16	
23	23	18	
20	23	20	
14	23	22	
8	23	24	
0	23	26	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	23	0	
0	23	2	
0	23	4	
0	23	6	
0	23	8	
0	23	10	
0	23	12	
0	23	14	
0	23	16	
0	23	18	
0	23	20	
0	23	22	
0	23	24	
0	23	26	
0	23	0	
0	23	2	
0	23	4	
0	23	6	
0	23	8	
0	23	10	
0	23	12	
0	23	14	
0	23	16	
0	23	18	
0	23	20	
0	23	22	
0	23	24	
0	23	26	
0	23	0	
51	23	2	
94	23	4	
128	23	6	
153	23	8	
170	23	10	
179	23	12	
179	23	14	
170	23	16	
153	23	18	
128	23	20	
94	23	22	
51	23	24	
0	23	26	
0	24	0	
42	24	1.9231	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
77	24	3.8462	
106	24	5.7692	
127	24	7.6923	
141	24	9.6154	
148	24	11.5385	
148	24	13.4615	
141	24	15.3846	
127	24	17.3077	
106	24	19.2308	
77	24	21.1539	
42	24	23.0769	
0	24	25	
0	24	0	
5	24	1.9231	
9	24	3.8462	
12	24	5.7692	
15	24	7.6923	
17	24	9.6154	
17	24	11.5385	
17	24	13.4615	
17	24	15.3846	
15	24	17.3077	
12	24	19.2308	
9	24	21.1539	
5	24	23.0769	
0	24	25	
0	24	0	
7	24	1.9231	
13	24	3.8462	
18	24	5.7692	
22	24	7.6923	
24	24	9.6154	
25	24	11.5385	
25	24	13.4615	
24	24	15.3846	
22	24	17.3077	
18	24	19.2308	
13	24	21.1539	
7	24	23.0769	
0	24	25	
0	24	0	
0	24	1.9231	
0	24	3.8462	
0	24	5.7692	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	24	7.6923	
0	24	9.6154	
0	24	11.5385	
0	24	13.4615	
0	24	15.3846	
0	24	17.3077	
0	24	19.2308	
0	24	21.1539	
0	24	23.0769	
0	24	25	
0	24	0	
0	24	1.9231	
0	24	3.8462	
0	24	5.7692	
0	24	7.6923	
0	24	9.6154	
0	24	11.5385	
0	24	13.4615	
0	24	15.3846	
0	24	17.3077	
0	24	19.2308	
0	24	21.1539	
0	24	23.0769	
0	24	25	
0	24	0	
47	24	1.9231	
87	24	3.8462	
118	24	5.7692	
142	24	7.6923	
157	24	9.6154	
165	24	11.5385	
165	24	13.4615	
157	24	15.3846	
142	24	17.3077	
118	24	19.2308	
87	24	21.1539	
47	24	23.0769	
0	24	25	
0	25	0	
49	25	2	
91	25	4	
126	25	6	
152	25	8	
171	25	10	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
183	25	12	
186	25	14	
183	25	16	
171	25	18	
152	25	20	
126	25	22	
91	25	24	
49	25	26	
0	25	28	
0	25	0	
6	25	2	
11	25	4	
15	25	6	
18	25	8	
20	25	10	
22	25	12	
22	25	14	
22	25	16	
20	25	18	
18	25	20	
15	25	22	
11	25	24	
6	25	26	
0	25	28	
0	25	0	
8	25	2	
16	25	4	
21	25	6	
26	25	8	
29	25	10	
31	25	12	
32	25	14	
31	25	16	
29	25	18	
26	25	20	
21	25	22	
16	25	24	
8	25	26	
0	25	28	
0	25	0	
0	25	2	
0	25	4	
0	25	6	
0	25	8	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	25	10	
0	25	12	
0	25	14	
0	25	16	
0	25	18	
0	25	20	
0	25	22	
0	25	24	
0	25	26	
0	25	28	
0	25	0	
0	25	2	
0	25	4	
0	25	6	
0	25	8	
0	25	10	
0	25	12	
0	25	14	
0	25	16	
0	25	18	
0	25	20	
0	25	22	
0	25	24	
0	25	26	
0	25	28	
0	25	0	
55	25	2	
102	25	4	
140	25	6	
170	25	8	
192	25	10	
204	25	12	
209	25	14	
204	25	16	
192	25	18	
170	25	20	
140	25	22	
102	25	24	
55	25	26	
0	25	28	
0	26	0	
49	26	2	
91	26	4	
126	26	6	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
152	26	8	
171	26	10	
183	26	12	
186	26	14	
183	26	16	
171	26	18	
152	26	20	
126	26	22	
91	26	24	
49	26	26	
0	26	28	
0	26	0	
6	26	2	
11	26	4	
15	26	6	
18	26	8	
20	26	10	
22	26	12	
22	26	14	
22	26	16	
20	26	18	
18	26	20	
15	26	22	
11	26	24	
6	26	26	
0	26	28	
0	26	0	
8	26	2	
16	26	4	
21	26	6	
26	26	8	
29	26	10	
31	26	12	
32	26	14	
31	26	16	
29	26	18	
26	26	20	
21	26	22	
16	26	24	
8	26	26	
0	26	28	
0	26	0	
0	26	2	
0	26	4	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	26	6	
0	26	8	
0	26	10	
0	26	12	
0	26	14	
0	26	16	
0	26	18	
0	26	20	
0	26	22	
0	26	24	
0	26	26	
0	26	28	
0	26	0	
0	26	2	
0	26	4	
0	26	6	
0	26	8	
0	26	10	
0	26	12	
0	26	14	
0	26	16	
0	26	18	
0	26	20	
0	26	22	
0	26	24	
0	26	26	
0	26	28	
0	26	0	
55	26	2	
102	26	4	
140	26	6	
170	26	8	
192	26	10	
204	26	12	
209	26	14	
204	26	16	
192	26	18	
170	26	20	
140	26	22	
102	26	24	
55	26	26	
0	26	28	
0	27	0	
42	27	1.9231	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
77	27	3.8462	
106	27	5.7692	
127	27	7.6923	
141	27	9.6154	
148	27	11.5385	
148	27	13.4615	
141	27	15.3846	
127	27	17.3077	
106	27	19.2308	
77	27	21.1538	
42	27	23.0769	
0	27	25	
0	27	0	
5	27	1.9231	
9	27	3.8462	
12	27	5.7692	
15	27	7.6923	
17	27	9.6154	
17	27	11.5385	
17	27	13.4615	
17	27	15.3846	
15	27	17.3077	
12	27	19.2308	
9	27	21.1538	
5	27	23.0769	
0	27	25	
0	27	0	
7	27	1.9231	
13	27	3.8462	
18	27	5.7692	
22	27	7.6923	
24	27	9.6154	
25	27	11.5385	
25	27	13.4615	
24	27	15.3846	
22	27	17.3077	
18	27	19.2308	
13	27	21.1538	
7	27	23.0769	
0	27	25	
0	27	0	
0	27	1.9231	
0	27	3.8462	
0	27	5.7692	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	27	7.6923	
0	27	9.6154	
0	27	11.5385	
0	27	13.4615	
0	27	15.3846	
0	27	17.3077	
0	27	19.2308	
0	27	21.1538	
0	27	23.0769	
0	27	25	
0	27	0	
0	27	1.9231	
0	27	3.8462	
0	27	5.7692	
0	27	7.6923	
0	27	9.6154	
0	27	11.5385	
0	27	13.4615	
0	27	15.3846	
0	27	17.3077	
0	27	19.2308	
0	27	21.1538	
0	27	23.0769	
0	27	25	
0	27	0	
47	27	1.9231	
87	27	3.8462	
118	27	5.7692	
142	27	7.6923	
157	27	9.6154	
165	27	11.5385	
165	27	13.4615	
157	27	15.3846	
142	27	17.3077	
118	27	19.2308	
87	27	21.1538	
47	27	23.0769	
0	27	25	
0	28	0	
71	28	1.975	
134	28	3.95	
189	28	5.925	
238	28	7.9	
278	28	9.875	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

<b>M3 kip-ft</b>	<b>Element</b>	<b>Elem Station ft</b>	<b>Location</b>
312	28	11.85	
338	28	13.825	
356	28	15.8	
367	28	17.775	
371	28	19.75	
367	28	21.725	
356	28	23.7	
338	28	25.675	
312	28	27.65	
278	28	29.625	
238	28	31.6	
189	28	33.575	
134	28	35.55	
71	28	37.525	
0	28	39.5	
0	28	0	
8	28	1.975	
16	28	3.95	
22	28	5.925	
28	28	7.9	
33	28	9.875	
37	28	11.85	
40	28	13.825	
42	28	15.8	
43	28	17.775	
44	28	19.75	
43	28	21.725	
42	28	23.7	
40	28	25.675	
37	28	27.65	
33	28	29.625	
28	28	31.6	
22	28	33.575	
16	28	35.55	
8	28	37.525	
0	28	39.5	
0	28	0	
12	28	1.975	
23	28	3.95	
32	28	5.925	
41	28	7.9	
48	28	9.875	
53	28	11.85	
58	28	13.825	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
61	28	15.8	
63	28	17.775	
63	28	19.75	
63	28	21.725	
61	28	23.7	
58	28	25.675	
53	28	27.65	
48	28	29.625	
41	28	31.6	
32	28	33.575	
23	28	35.55	
12	28	37.525	
0	28	39.5	
0	28	0	
0	28	1.975	
0	28	3.95	
0	28	5.925	
0	28	7.9	
0	28	9.875	
0	28	11.85	
0	28	13.825	
0	28	15.8	
0	28	17.775	
0	28	19.75	
0	28	21.725	
0	28	23.7	
0	28	25.675	
0	28	27.65	
0	28	29.625	
0	28	31.6	
0	28	33.575	
0	28	35.55	
0	28	37.525	
0	28	39.5	
0	28	0	
0	28	1.975	
0	28	3.95	
0	28	5.925	
0	28	7.9	
0	28	9.875	
0	28	11.85	
0	28	13.825	
0	28	15.8	
0	28	17.775	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	28	19.75	
0	28	21.725	
0	28	23.7	
0	28	25.675	
0	28	27.65	
0	28	29.625	
0	28	31.6	
0	28	33.575	
0	28	35.55	
0	28	37.525	
0	28	39.5	
0	28	0	
79	28	1.975	
149	28	3.95	
212	28	5.925	
266	28	7.9	
311	28	9.875	
349	28	11.85	
378	28	13.825	
398	28	15.8	
411	28	17.775	
415	28	19.75	
411	28	21.725	
398	28	23.7	
378	28	25.675	
349	28	27.65	
311	28	29.625	
266	28	31.6	
212	28	33.575	
149	28	35.55	
79	28	37.525	
0	28	39.5	
0	29	0	
21	29	1.9286	
35	29	3.8571	
42	29	5.7857	
42	29	7.7143	
35	29	9.6429	
21	29	11.5714	
0	29	13.5	
0	29	0	
0.4486	29	1.9286	
1	29	3.8571	
1	29	5.7857	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
1	29	7.7143	
1	29	9.6429	
0.4486	29	11.5714	
0	29	13.5	
0	29	0	
1	29	1.9286	
1	29	3.8571	
1	29	5.7857	
1	29	7.7143	
1	29	9.6429	
1	29	11.5714	
0	29	13.5	
0	29	0	
0	29	1.9286	
0	29	3.8571	
0	29	5.7857	
0	29	7.7143	
0	29	9.6429	
0	29	11.5714	
0	29	13.5	
0	29	0	
0	29	1.9286	
0	29	3.8571	
0	29	5.7857	
0	29	7.7143	
0	29	9.6429	
0	29	11.5714	
0	29	13.5	
0	29	0	
22	29	1.9286	
36	29	3.8571	
43	29	5.7857	
43	29	7.7143	
36	29	9.6429	
22	29	11.5714	
0	29	13.5	
0	30	0	
42	30	1.9231	
77	30	3.8462	
106	30	5.7692	
127	30	7.6923	
141	30	9.6154	
148	30	11.5385	
148	30	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
141	30	15.3846	
127	30	17.3077	
106	30	19.2308	
77	30	21.1538	
42	30	23.0769	
0	30	25	
0	30	0	
1	30	1.9231	
2	30	3.8462	
2	30	5.7692	
3	30	7.6923	
3	30	9.6154	
3	30	11.5385	
3	30	13.4615	
3	30	15.3846	
3	30	17.3077	
2	30	19.2308	
2	30	21.1538	
1	30	23.0769	
0	30	25	
0	30	0	
1	30	1.9231	
3	30	3.8462	
4	30	5.7692	
4	30	7.6923	
5	30	9.6154	
5	30	11.5385	
5	30	13.4615	
5	30	15.3846	
4	30	17.3077	
4	30	19.2308	
3	30	21.1538	
1	30	23.0769	
0	30	25	
0	30	0	
0	30	1.9231	
0	30	3.8462	
0	30	5.7692	
0	30	7.6923	
0	30	9.6154	
0	30	11.5385	
0	30	13.4615	
0	30	15.3846	
0	30	17.3077	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	30	19.2308	
0	30	21.1538	
0	30	23.0769	
0	30	25	
0	30	0	
0	30	1.9231	
0	30	3.8462	
0	30	5.7692	
0	30	7.6923	
0	30	9.6154	
0	30	11.5385	
0	30	13.4615	
0	30	15.3846	
0	30	17.3077	
0	30	19.2308	
0	30	21.1538	
0	30	23.0769	
0	30	25	
0	30	0	
43	30	1.9231	
79	30	3.8462	
108	30	5.7692	
129	30	7.6923	
144	30	9.6154	
151	30	11.5385	
151	30	13.4615	
144	30	15.3846	
129	30	17.3077	
108	30	19.2308	
79	30	21.1538	
43	30	23.0769	
0	30	25	
0	82	0	
42	82	1.9231	
77	82	3.8462	
106	82	5.7692	
127	82	7.6923	
141	82	9.6154	
148	82	11.5385	
148	82	13.4615	
141	82	15.3846	
127	82	17.3077	
106	82	19.2308	
77	82	21.1538	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
42	82	23.0769	
0	82	25	
0	82	0	
1	82	1.9231	
2	82	3.8462	
2	82	5.7692	
3	82	7.6923	
3	82	9.6154	
3	82	11.5385	
3	82	13.4615	
3	82	15.3846	
3	82	17.3077	
2	82	19.2308	
2	82	21.1538	
1	82	23.0769	
0	82	25	
0	82	0	
1	82	1.9231	
3	82	3.8462	
4	82	5.7692	
4	82	7.6923	
5	82	9.6154	
5	82	11.5385	
5	82	13.4615	
5	82	15.3846	
4	82	17.3077	
4	82	19.2308	
3	82	21.1538	
1	82	23.0769	
0	82	25	
0	82	0	
0	82	1.9231	
0	82	3.8462	
0	82	5.7692	
0	82	7.6923	
0	82	9.6154	
0	82	11.5385	
0	82	13.4615	
0	82	15.3846	
0	82	17.3077	
0	82	19.2308	
0	82	21.1538	
0	82	23.0769	
0	82	25	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	82	0	
0	82	1.9231	
0	82	3.8462	
0	82	5.7692	
0	82	7.6923	
0	82	9.6154	
0	82	11.5385	
0	82	13.4615	
0	82	15.3846	
0	82	17.3077	
0	82	19.2308	
0	82	21.1538	
0	82	23.0769	
0	82	25	
0	82	0	
43	82	1.9231	
79	82	3.8462	
108	82	5.7692	
129	82	7.6923	
144	82	9.6154	
151	82	11.5385	
151	82	13.4615	
144	82	15.3846	
129	82	17.3077	
108	82	19.2308	
79	82	21.1538	
43	82	23.0769	
0	82	25	
0	89	0	
42	89	1.9231	
77	89	3.8462	
106	89	5.7692	
127	89	7.6923	
141	89	9.6154	
148	89	11.5385	
148	89	13.4615	
141	89	15.3846	
127	89	17.3077	
106	89	19.2308	
77	89	21.1538	
42	89	23.0769	
0	89	25	
0	89	0	
1	89	1.9231	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
2	89	3.8462	
2	89	5.7692	
3	89	7.6923	
3	89	9.6154	
3	89	11.5385	
3	89	13.4615	
3	89	15.3846	
3	89	17.3077	
2	89	19.2308	
2	89	21.1538	
1	89	23.0769	
0	89	25	
0	89	0	
1	89	1.9231	
3	89	3.8462	
4	89	5.7692	
4	89	7.6923	
5	89	9.6154	
5	89	11.5385	
5	89	13.4615	
5	89	15.3846	
4	89	17.3077	
4	89	19.2308	
3	89	21.1538	
1	89	23.0769	
0	89	25	
0	89	0	
0	89	1.9231	
0	89	3.8462	
0	89	5.7692	
0	89	7.6923	
0	89	9.6154	
0	89	11.5385	
0	89	13.4615	
0	89	15.3846	
0	89	17.3077	
0	89	19.2308	
0	89	21.1538	
0	89	23.0769	
0	89	25	
0	89	0	
0	89	1.9231	
0	89	3.8462	
0	89	5.7692	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	89	7.6923	
0	89	9.6154	
0	89	11.5385	
0	89	13.4615	
0	89	15.3846	
0	89	17.3077	
0	89	19.2308	
0	89	21.1538	
0	89	23.0769	
0	89	25	
0	89	0	
43	89	1.9231	
79	89	3.8462	
108	89	5.7692	
129	89	7.6923	
144	89	9.6154	
151	89	11.5385	
151	89	13.4615	
144	89	15.3846	
129	89	17.3077	
108	89	19.2308	
79	89	21.1538	
43	89	23.0769	
0	89	25	
0	90	0	
42	90	1.9231	
77	90	3.8462	
106	90	5.7692	
127	90	7.6923	
141	90	9.6154	
148	90	11.5385	
148	90	13.4615	
141	90	15.3846	
127	90	17.3077	
106	90	19.2308	
77	90	21.1538	
42	90	23.0769	
0	90	25	
0	90	0	
1	90	1.9231	
2	90	3.8462	
2	90	5.7692	
3	90	7.6923	
3	90	9.6154	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
3	90	11.5385	
3	90	13.4615	
3	90	15.3846	
3	90	17.3077	
2	90	19.2308	
2	90	21.1538	
1	90	23.0769	
0	90	25	
0	90	0	
1	90	1.9231	
3	90	3.8462	
4	90	5.7692	
4	90	7.6923	
5	90	9.6154	
5	90	11.5385	
5	90	13.4615	
5	90	15.3846	
4	90	17.3077	
4	90	19.2308	
3	90	21.1538	
1	90	23.0769	
0	90	25	
0	90	0	
0	90	1.9231	
0	90	3.8462	
0	90	5.7692	
0	90	7.6923	
0	90	9.6154	
0	90	11.5385	
0	90	13.4615	
0	90	15.3846	
0	90	17.3077	
0	90	19.2308	
0	90	21.1538	
0	90	23.0769	
0	90	25	
0	90	0	
0	90	1.9231	
0	90	3.8462	
0	90	5.7692	
0	90	7.6923	
0	90	9.6154	
0	90	11.5385	
0	90	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	90	15.3846	
0	90	17.3077	
0	90	19.2308	
0	90	21.1538	
0	90	23.0769	
0	90	25	
0	90	0	
43	90	1.9231	
79	90	3.8462	
108	90	5.7692	
129	90	7.6923	
144	90	9.6154	
151	90	11.5385	
151	90	13.4615	
144	90	15.3846	
129	90	17.3077	
108	90	19.2308	
79	90	21.1538	
43	90	23.0769	
0	90	25	
0	91	0	
42	91	1.9231	
77	91	3.8462	
106	91	5.7692	
127	91	7.6923	
141	91	9.6154	
148	91	11.5385	
148	91	13.4615	
141	91	15.3846	
127	91	17.3077	
106	91	19.2308	
77	91	21.1539	
42	91	23.0769	
0	91	25	
0	91	0	
1	91	1.9231	
2	91	3.8462	
2	91	5.7692	
3	91	7.6923	
3	91	9.6154	
3	91	11.5385	
3	91	13.4615	
3	91	15.3846	
3	91	17.3077	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
2	91	19.2308	
2	91	21.1539	
1	91	23.0769	
0	91	25	
0	91	0	
1	91	1.9231	
3	91	3.8462	
4	91	5.7692	
4	91	7.6923	
5	91	9.6154	
5	91	11.5385	
5	91	13.4615	
5	91	15.3846	
4	91	17.3077	
4	91	19.2308	
3	91	21.1539	
1	91	23.0769	
0	91	25	
0	91	0	
0	91	1.9231	
0	91	3.8462	
0	91	5.7692	
0	91	7.6923	
0	91	9.6154	
0	91	11.5385	
0	91	13.4615	
0	91	15.3846	
0	91	17.3077	
0	91	19.2308	
0	91	21.1539	
0	91	23.0769	
0	91	25	
0	91	0	
0	91	1.9231	
0	91	3.8462	
0	91	5.7692	
0	91	7.6923	
0	91	9.6154	
0	91	11.5385	
0	91	13.4615	
0	91	15.3846	
0	91	17.3077	
0	91	19.2308	
0	91	21.1539	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	91	23.0769	
0	91	25	
0	91	0	
43	91	1.9231	
79	91	3.8462	
108	91	5.7692	
129	91	7.6923	
144	91	9.6154	
151	91	11.5385	
151	91	13.4615	
144	91	15.3846	
129	91	17.3077	
108	91	19.2308	
79	91	21.1539	
43	91	23.0769	
0	91	25	
0	92	0	
42	92	1.9231	
77	92	3.8462	
106	92	5.7692	
127	92	7.6923	
141	92	9.6154	
148	92	11.5385	
148	92	13.4615	
141	92	15.3846	
127	92	17.3077	
106	92	19.2308	
77	92	21.1538	
42	92	23.0769	
0	92	25	
0	92	0	
1	92	1.9231	
2	92	3.8462	
2	92	5.7692	
3	92	7.6923	
3	92	9.6154	
3	92	11.5385	
3	92	13.4615	
3	92	15.3846	
3	92	17.3077	
2	92	19.2308	
2	92	21.1538	
1	92	23.0769	
0	92	25	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	92	0	
1	92	1.9231	
3	92	3.8462	
4	92	5.7692	
4	92	7.6923	
5	92	9.6154	
5	92	11.5385	
5	92	13.4615	
5	92	15.3846	
4	92	17.3077	
4	92	19.2308	
3	92	21.1538	
1	92	23.0769	
0	92	25	
0	92	0	
0	92	1.9231	
0	92	3.8462	
0	92	5.7692	
0	92	7.6923	
0	92	9.6154	
0	92	11.5385	
0	92	13.4615	
0	92	15.3846	
0	92	17.3077	
0	92	19.2308	
0	92	21.1538	
0	92	23.0769	
0	92	25	
0	92	0	
0	92	1.9231	
0	92	3.8462	
0	92	5.7692	
0	92	7.6923	
0	92	9.6154	
0	92	11.5385	
0	92	13.4615	
0	92	15.3846	
0	92	17.3077	
0	92	19.2308	
0	92	21.1538	
0	92	23.0769	
0	92	25	
0	92	0	
0	92	1.9231	
0	92	3.8462	
0	92	5.7692	
0	92	7.6923	
0	92	9.6154	
0	92	11.5385	
0	92	13.4615	
0	92	15.3846	
0	92	17.3077	
0	92	19.2308	
0	92	21.1538	
0	92	23.0769	
0	92	25	
0	92	0	
43	92	1.9231	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
79	92	3.8462	
108	92	5.7692	
129	92	7.6923	
144	92	9.6154	
151	92	11.5385	
151	92	13.4615	
144	92	15.3846	
129	92	17.3077	
108	92	19.2308	
79	92	21.1538	
43	92	23.0769	
0	92	25	
0	93-1	0	
3	93-1	1.75	
0	93-1	3.5	
0	93-2	0	
8	93-2	1.625	
10	93-2	3.25	
8	93-2	4.875	
0	93-2	6.5	
0	93-3	0	
23	93-3	1.875	
40	93-3	3.75	
50	93-3	5.625	
54	93-3	7.5	
50	93-3	9.375	
40	93-3	11.25	
23	93-3	13.125	
0	93-3	15	
0	93-1	0	
0.06156	93-1	1.75	
0	93-1	3.5	
0	93-2	0	
0.1592	93-2	1.625	
0.2123	93-2	3.25	
0.1592	93-2	4.875	
0	93-2	6.5	
0	93-3	0	
0.4946	93-3	1.875	
1	93-3	3.75	
1	93-3	5.625	
1	93-3	7.5	
1	93-3	9.375	
1	93-3	11.25	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0.4946	93-3	13.125	
0	93-3	15	
0	93-1	0	
0.1005	93-1	1.75	
0	93-1	3.5	
0	93-2	0	
0.2598	93-2	1.625	
0.3465	93-2	3.25	
0.2598	93-2	4.875	
0	93-2	6.5	
0	93-3	0	
1	93-3	1.875	
1	93-3	3.75	
2	93-3	5.625	
2	93-3	7.5	
2	93-3	9.375	
1	93-3	11.25	
1	93-3	13.125	
0	93-3	15	
0	93-1	0	
0	93-1	1.75	
0	93-1	3.5	
0	93-2	0	
0	93-2	1.625	
0	93-2	3.25	
0	93-2	4.875	
0	93-2	6.5	
0	93-3	0	
0	93-3	1.875	
0	93-3	3.75	
0	93-3	5.625	
0	93-3	7.5	
0	93-3	9.375	
0	93-3	11.25	
0	93-3	13.125	
0	93-3	15	
0	93-1	0	
0	93-1	1.75	
0	93-1	3.5	
0	93-2	0	
0	93-2	1.625	
0	93-2	3.25	
0	93-2	4.875	
0	93-2	6.5	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	93-3	0	
0	93-3	1.875	
0	93-3	3.75	
0	93-3	5.625	
0	93-3	7.5	
0	93-3	9.375	
0	93-3	11.25	
0	93-3	13.125	
0	93-3	15	
0	93-1	0	
3	93-1	1.75	
0	93-1	3.5	
0	93-2	0	
8	93-2	1.625	
10	93-2	3.25	
8	93-2	4.875	
0	93-2	6.5	
0	93-3	0	
24	93-3	1.875	
41	93-3	3.75	
51	93-3	5.625	
55	93-3	7.5	
51	93-3	9.375	
41	93-3	11.25	
24	93-3	13.125	
0	93-3	15	
0	94	0	
42	94	1.9231	
77	94	3.8462	
106	94	5.7692	
127	94	7.6923	
141	94	9.6154	
148	94	11.5385	
148	94	13.4615	
141	94	15.3846	
127	94	17.3077	
106	94	19.2308	
77	94	21.1538	
42	94	23.0769	
0	94	25	
0	94	0	
1	94	1.9231	
2	94	3.8462	
2	94	5.7692	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
3	94	7.6923	
3	94	9.6154	
3	94	11.5385	
3	94	13.4615	
3	94	15.3846	
3	94	17.3077	
2	94	19.2308	
2	94	21.1538	
1	94	23.0769	
0	94	25	
0	94	0	
1	94	1.9231	
3	94	3.8462	
4	94	5.7692	
4	94	7.6923	
5	94	9.6154	
5	94	11.5385	
5	94	13.4615	
5	94	15.3846	
4	94	17.3077	
4	94	19.2308	
3	94	21.1538	
1	94	23.0769	
0	94	25	
0	94	0	
0	94	1.9231	
0	94	3.8462	
0	94	5.7692	
0	94	7.6923	
0	94	9.6154	
0	94	11.5385	
0	94	13.4615	
0	94	15.3846	
0	94	17.3077	
0	94	19.2308	
0	94	21.1538	
0	94	23.0769	
0	94	25	
0	94	0	
0	94	1.9231	
0	94	3.8462	
0	94	5.7692	
0	94	7.6923	
0	94	9.6154	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	94	11.5385	
0	94	13.4615	
0	94	15.3846	
0	94	17.3077	
0	94	19.2308	
0	94	21.1538	
0	94	23.0769	
0	94	25	
0	94	0	
43	94	1.9231	
79	94	3.8462	
108	94	5.7692	
129	94	7.6923	
144	94	9.6154	
151	94	11.5385	
151	94	13.4615	
144	94	15.3846	
129	94	17.3077	
108	94	19.2308	
79	94	21.1538	
43	94	23.0769	
0	94	25	
0	95	0	
42	95	1.9231	
77	95	3.8462	
106	95	5.7692	
127	95	7.6923	
141	95	9.6154	
148	95	11.5385	
148	95	13.4615	
141	95	15.3846	
127	95	17.3077	
106	95	19.2308	
77	95	21.1539	
42	95	23.0769	
0	95	25	
0	95	0	
1	95	1.9231	
2	95	3.8462	
2	95	5.7692	
3	95	7.6923	
3	95	9.6154	
3	95	11.5385	
3	95	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
3	95	15.3846	
3	95	17.3077	
2	95	19.2308	
2	95	21.1539	
1	95	23.0769	
0	95	25	
0	95	0	
1	95	1.9231	
3	95	3.8462	
4	95	5.7692	
4	95	7.6923	
5	95	9.6154	
5	95	11.5385	
5	95	13.4615	
5	95	15.3846	
4	95	17.3077	
4	95	19.2308	
3	95	21.1539	
1	95	23.0769	
0	95	25	
0	95	0	
0	95	1.9231	
0	95	3.8462	
0	95	5.7692	
0	95	7.6923	
0	95	9.6154	
0	95	11.5385	
0	95	13.4615	
0	95	15.3846	
0	95	17.3077	
0	95	19.2308	
0	95	21.1539	
0	95	23.0769	
0	95	25	
0	95	0	
0	95	1.9231	
0	95	3.8462	
0	95	5.7692	
0	95	7.6923	
0	95	9.6154	
0	95	11.5385	
0	95	13.4615	
0	95	15.3846	
0	95	17.3077	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	95	19.2308	
0	95	21.1539	
0	95	23.0769	
0	95	25	
0	95	0	
43	95	1.9231	
79	95	3.8462	
108	95	5.7692	
129	95	7.6923	
144	95	9.6154	
151	95	11.5385	
151	95	13.4615	
144	95	15.3846	
129	95	17.3077	
108	95	19.2308	
79	95	21.1539	
43	95	23.0769	
0	95	25	
0	96	0	
21	96	1.9286	
35	96	3.8571	
42	96	5.7857	
42	96	7.7143	
35	96	9.6428	
21	96	11.5714	
0	96	13.5	
0	96	0	
0.4486	96	1.9286	
1	96	3.8571	
1	96	5.7857	
1	96	7.7143	
1	96	9.6428	
0.4486	96	11.5714	
0	96	13.5	
0	96	0	
1	96	1.9286	
1	96	3.8571	
1	96	5.7857	
1	96	7.7143	
1	96	9.6428	
1	96	11.5714	
0	96	13.5	
0	96	0	
0	96	1.9286	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	96	3.8571	
0	96	5.7857	
0	96	7.7143	
0	96	9.6428	
0	96	11.5714	
0	96	13.5	
0	96	0	
0	96	1.9286	
0	96	3.8571	
0	96	5.7857	
0	96	7.7143	
0	96	9.6428	
0	96	11.5714	
0	96	13.5	
0	96	0	
22	96	1.9286	
36	96	3.8571	
43	96	5.7857	
43	96	7.7143	
36	96	9.6428	
22	96	11.5714	
0	96	13.5	
0	97	0	
21	97	1.9286	
35	97	3.8571	
42	97	5.7857	
42	97	7.7143	
35	97	9.6429	
21	97	11.5714	
0	97	13.5	
0	97	0	
0.4486	97	1.9286	
1	97	3.8571	
1	97	5.7857	
1	97	7.7143	
1	97	9.6429	
0.4486	97	11.5714	
0	97	13.5	
0	97	0	
1	97	1.9286	
1	97	3.8571	
1	97	5.7857	
1	97	7.7143	
1	97	9.6429	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
1	97	11.5714	
0	97	13.5	
0	97	0	
0	97	1.9286	
0	97	3.8571	
0	97	5.7857	
0	97	7.7143	
0	97	9.6429	
0	97	11.5714	
0	97	13.5	
0	97	0	
0	97	1.9286	
0	97	3.8571	
0	97	5.7857	
0	97	7.7143	
0	97	9.6429	
0	97	11.5714	
0	97	13.5	
0	97	0	
22	97	1.9286	
36	97	3.8571	
43	97	5.7857	
43	97	7.7143	
36	97	9.6429	
22	97	11.5714	
0	97	13.5	
0	98	0	
42	98	1.9231	
77	98	3.8462	
106	98	5.7692	
127	98	7.6923	
141	98	9.6154	
148	98	11.5385	
148	98	13.4615	
141	98	15.3846	
127	98	17.3077	
106	98	19.2308	
77	98	21.1538	
42	98	23.0769	
0	98	25	
0	98	0	
1	98	1.9231	
2	98	3.8462	
2	98	5.7692	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
3	98	7.6923	
3	98	9.6154	
3	98	11.5385	
3	98	13.4615	
3	98	15.3846	
3	98	17.3077	
2	98	19.2308	
2	98	21.1538	
1	98	23.0769	
0	98	25	
0	98	0	
1	98	1.9231	
3	98	3.8462	
4	98	5.7692	
4	98	7.6923	
5	98	9.6154	
5	98	11.5385	
5	98	13.4615	
5	98	15.3846	
4	98	17.3077	
4	98	19.2308	
3	98	21.1538	
1	98	23.0769	
0	98	25	
0	98	0	
0	98	1.9231	
0	98	3.8462	
0	98	5.7692	
0	98	7.6923	
0	98	9.6154	
0	98	11.5385	
0	98	13.4615	
0	98	15.3846	
0	98	17.3077	
0	98	19.2308	
0	98	21.1538	
0	98	23.0769	
0	98	25	
0	98	0	
0	98	1.9231	
0	98	3.8462	
0	98	5.7692	
0	98	7.6923	
0	98	9.6154	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	98	11.5385	
0	98	13.4615	
0	98	15.3846	
0	98	17.3077	
0	98	19.2308	
0	98	21.1538	
0	98	23.0769	
0	98	25	
0	98	0	
43	98	1.9231	
79	98	3.8462	
108	98	5.7692	
129	98	7.6923	
144	98	9.6154	
151	98	11.5385	
151	98	13.4615	
144	98	15.3846	
129	98	17.3077	
108	98	19.2308	
79	98	21.1538	
43	98	23.0769	
0	98	25	
0	99	0	
42	99	1.9231	
77	99	3.8462	
106	99	5.7692	
127	99	7.6923	
141	99	9.6154	
148	99	11.5385	
148	99	13.4615	
141	99	15.3846	
127	99	17.3077	
106	99	19.2308	
77	99	21.1538	
42	99	23.0769	
0	99	25	
0	99	0	
1	99	1.9231	
2	99	3.8462	
2	99	5.7692	
3	99	7.6923	
3	99	9.6154	
3	99	11.5385	
3	99	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
3	99	15.3846	
3	99	17.3077	
2	99	19.2308	
2	99	21.1538	
1	99	23.0769	
0	99	25	
0	99	0	
1	99	1.9231	
3	99	3.8462	
4	99	5.7692	
4	99	7.6923	
5	99	9.6154	
5	99	11.5385	
5	99	13.4615	
5	99	15.3846	
4	99	17.3077	
4	99	19.2308	
3	99	21.1538	
1	99	23.0769	
0	99	25	
0	99	0	
0	99	1.9231	
0	99	3.8462	
0	99	5.7692	
0	99	7.6923	
0	99	9.6154	
0	99	11.5385	
0	99	13.4615	
0	99	15.3846	
0	99	17.3077	
0	99	19.2308	
0	99	21.1538	
0	99	23.0769	
0	99	25	
0	99	0	
0	99	1.9231	
0	99	3.8462	
0	99	5.7692	
0	99	7.6923	
0	99	9.6154	
0	99	11.5385	
0	99	13.4615	
0	99	15.3846	
0	99	17.3077	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	99	19.2308	
0	99	21.1538	
0	99	23.0769	
0	99	25	
0	99	0	
43	99	1.9231	
79	99	3.8462	
108	99	5.7692	
129	99	7.6923	
144	99	9.6154	
151	99	11.5385	
151	99	13.4615	
144	99	15.3846	
129	99	17.3077	
108	99	19.2308	
79	99	21.1538	
43	99	23.0769	
0	99	25	
0	100	0	
42	100	1.9231	
77	100	3.8462	
106	100	5.7692	
127	100	7.6923	
141	100	9.6154	
148	100	11.5385	
148	100	13.4615	
141	100	15.3846	
127	100	17.3077	
106	100	19.2308	
77	100	21.1538	
42	100	23.0769	
0	100	25	
0	100	0	
1	100	1.9231	
2	100	3.8462	
2	100	5.7692	
3	100	7.6923	
3	100	9.6154	
3	100	11.5385	
3	100	13.4615	
3	100	15.3846	
3	100	17.3077	
2	100	19.2308	
2	100	21.1538	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
1	100	23.0769	
0	100	25	
0	100	0	
1	100	1.9231	
3	100	3.8462	
4	100	5.7692	
4	100	7.6923	
5	100	9.6154	
5	100	11.5385	
5	100	13.4615	
5	100	15.3846	
4	100	17.3077	
4	100	19.2308	
3	100	21.1538	
1	100	23.0769	
0	100	25	
0	100	0	
0	100	1.9231	
0	100	3.8462	
0	100	5.7692	
0	100	7.6923	
0	100	9.6154	
0	100	11.5385	
0	100	13.4615	
0	100	15.3846	
0	100	17.3077	
0	100	19.2308	
0	100	21.1538	
0	100	23.0769	
0	100	25	
0	100	0	
0	100	1.9231	
0	100	3.8462	
0	100	5.7692	
0	100	7.6923	
0	100	9.6154	
0	100	11.5385	
0	100	13.4615	
0	100	15.3846	
0	100	17.3077	
0	100	19.2308	
0	100	21.1538	
0	100	23.0769	
0	100	25	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	100	0	
43	100	1.9231	
79	100	3.8462	
108	100	5.7692	
129	100	7.6923	
144	100	9.6154	
151	100	11.5385	
151	100	13.4615	
144	100	15.3846	
129	100	17.3077	
108	100	19.2308	
79	100	21.1538	
43	100	23.0769	
0	100	25	
0	101	0	
42	101	1.9231	
77	101	3.8462	
106	101	5.7692	
127	101	7.6923	
141	101	9.6154	
148	101	11.5385	
148	101	13.4615	
141	101	15.3846	
127	101	17.3077	
106	101	19.2308	
77	101	21.1538	
42	101	23.0769	
0	101	25	
0	101	0	
1	101	1.9231	
2	101	3.8462	
2	101	5.7692	
3	101	7.6923	
3	101	9.6154	
3	101	11.5385	
3	101	13.4615	
3	101	15.3846	
3	101	17.3077	
2	101	19.2308	
2	101	21.1538	
1	101	23.0769	
0	101	25	
0	101	0	
1	101	1.9231	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
3	101	3.8462	
4	101	5.7692	
4	101	7.6923	
5	101	9.6154	
5	101	11.5385	
5	101	13.4615	
5	101	15.3846	
4	101	17.3077	
4	101	19.2308	
3	101	21.1538	
1	101	23.0769	
0	101	25	
0	101	0	
0	101	1.9231	
0	101	3.8462	
0	101	5.7692	
0	101	7.6923	
0	101	9.6154	
0	101	11.5385	
0	101	13.4615	
0	101	15.3846	
0	101	17.3077	
0	101	19.2308	
0	101	21.1538	
0	101	23.0769	
0	101	25	
0	101	0	
0	101	1.9231	
0	101	3.8462	
0	101	5.7692	
0	101	7.6923	
0	101	9.6154	
0	101	11.5385	
0	101	13.4615	
0	101	15.3846	
0	101	17.3077	
0	101	19.2308	
0	101	21.1538	
0	101	23.0769	
0	101	25	
0	101	0	
43	101	1.9231	
79	101	3.8462	
108	101	5.7692	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
129	101	7.6923	
144	101	9.6154	
151	101	11.5385	
151	101	13.4615	
144	101	15.3846	
129	101	17.3077	
108	101	19.2308	
79	101	21.1538	
43	101	23.0769	
0	101	25	
0	102	0	
42	102	1.9231	
77	102	3.8462	
106	102	5.7692	
127	102	7.6923	
141	102	9.6154	
148	102	11.5385	
148	102	13.4615	
141	102	15.3846	
127	102	17.3077	
106	102	19.2308	
77	102	21.1538	
42	102	23.0769	
0	102	25	
0	102	0	
1	102	1.9231	
2	102	3.8462	
2	102	5.7692	
3	102	7.6923	
3	102	9.6154	
3	102	11.5385	
3	102	13.4615	
3	102	15.3846	
3	102	17.3077	
2	102	19.2308	
2	102	21.1538	
1	102	23.0769	
0	102	25	
0	102	0	
1	102	1.9231	
3	102	3.8462	
4	102	5.7692	
4	102	7.6923	
5	102	9.6154	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
5	102	11.5385	
5	102	13.4615	
5	102	15.3846	
4	102	17.3077	
4	102	19.2308	
3	102	21.1538	
1	102	23.0769	
0	102	25	
0	102	0	
0	102	1.9231	
0	102	3.8462	
0	102	5.7692	
0	102	7.6923	
0	102	9.6154	
0	102	11.5385	
0	102	13.4615	
0	102	15.3846	
0	102	17.3077	
0	102	19.2308	
0	102	21.1538	
0	102	23.0769	
0	102	25	
0	102	0	
0	102	1.9231	
0	102	3.8462	
0	102	5.7692	
0	102	7.6923	
0	102	9.6154	
0	102	11.5385	
0	102	13.4615	
0	102	15.3846	
0	102	17.3077	
0	102	19.2308	
0	102	21.1538	
0	102	23.0769	
0	102	25	
0	102	0	
43	102	1.9231	
79	102	3.8462	
108	102	5.7692	
129	102	7.6923	
144	102	9.6154	
151	102	11.5385	
151	102	13.4615	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
144	102	15.3846	
129	102	17.3077	
108	102	19.2308	
79	102	21.1538	
43	102	23.0769	
0	102	25	
0	103	0	
42	103	1.9231	
77	103	3.8462	
106	103	5.7692	
127	103	7.6923	
141	103	9.6154	
148	103	11.5385	
148	103	13.4615	
141	103	15.3846	
127	103	17.3077	
106	103	19.2308	
77	103	21.1539	
42	103	23.0769	
0	103	25	
0	103	0	
1	103	1.9231	
2	103	3.8462	
2	103	5.7692	
3	103	7.6923	
3	103	9.6154	
3	103	11.5385	
3	103	13.4615	
3	103	15.3846	
3	103	17.3077	
2	103	19.2308	
2	103	21.1539	
1	103	23.0769	
0	103	25	
0	103	0	
1	103	1.9231	
3	103	3.8462	
4	103	5.7692	
4	103	7.6923	
5	103	9.6154	
5	103	11.5385	
5	103	13.4615	
5	103	15.3846	
4	103	17.3077	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
4	103	19.2308	
3	103	21.1539	
1	103	23.0769	
0	103	25	
0	103	0	
0	103	1.9231	
0	103	3.8462	
0	103	5.7692	
0	103	7.6923	
0	103	9.6154	
0	103	11.5385	
0	103	13.4615	
0	103	15.3846	
0	103	17.3077	
0	103	19.2308	
0	103	21.1539	
0	103	23.0769	
0	103	25	
0	103	0	
0	103	1.9231	
0	103	3.8462	
0	103	5.7692	
0	103	7.6923	
0	103	9.6154	
0	103	11.5385	
0	103	13.4615	
0	103	15.3846	
0	103	17.3077	
0	103	19.2308	
0	103	21.1539	
0	103	23.0769	
0	103	25	
0	103	0	
43	103	1.9231	
79	103	3.8462	
108	103	5.7692	
129	103	7.6923	
144	103	9.6154	
151	103	11.5385	
151	103	13.4615	
144	103	15.3846	
129	103	17.3077	
108	103	19.2308	
79	103	21.1539	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
43	103	23.0769	
0	103	25	
0	21	0	
21	21	1.9286	
35	21	3.8571	
42	21	5.7857	
42	21	7.7143	
35	21	9.6429	
21	21	11.5714	
0	21	13.5	
0	21	0	
3	21	1.9286	
4	21	3.8571	
5	21	5.7857	
5	21	7.7143	
4	21	9.6429	
3	21	11.5714	
0	21	13.5	
0	21	0	
4	21	1.9286	
6	21	3.8571	
7	21	5.7857	
7	21	7.7143	
6	21	9.6429	
4	21	11.5714	
0	21	13.5	
0	21	0	
0	21	1.9286	
0	21	3.8571	
0	21	5.7857	
0	21	7.7143	
0	21	9.6429	
0	21	11.5714	
0	21	13.5	
0	21	0	
0	21	1.9286	
0	21	3.8571	
0	21	5.7857	
0	21	7.7143	
0	21	9.6429	
0	21	11.5714	
0	21	13.5	
0	21	0	
24	21	1.9286	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
40	21	3.8571	
47	21	5.7857	
47	21	7.7143	
40	21	9.6429	
24	21	11.5714	
0	21	13.5	
0	104-1	0	
4	104-1	1.5	
4	104-1	3	
0	104-1	4.5	
0	104-2	0	
3	104-2	1.75	
0	104-2	3.5	
0	104-3	0	
11	104-3	1.7	
16	104-3	3.4	
16	104-3	5.1	
11	104-3	6.8	
0	104-3	8.5	
0	104-4	0	
11	104-4	1.7	
16	104-4	3.4	
16	104-4	5.1	
11	104-4	6.8	
0	104-4	8.5	
0	104-1	0	
0.09045	104-1	1.5	
0.09045	104-1	3	
0	104-1	4.5	
0	104-2	0	
0.06156	104-2	1.75	
0	104-2	3.5	
0	104-3	0	
0.2324	104-3	1.7	
0.3485	104-3	3.4	
0.3485	104-3	5.1	
0.2324	104-3	6.8	
0	104-3	8.5	
0	104-4	0	
0.2324	104-4	1.7	
0.3485	104-4	3.4	
0.3485	104-4	5.1	
0.2324	104-4	6.8	
0	104-4	8.5	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	104-1	0	
0.1476	104-1	1.5	
0.1476	104-1	3	
0	104-1	4.5	
0	104-2	0	
0.1005	104-2	1.75	
0	104-2	3.5	
0	104-3	0	
0.3792	104-3	1.7	
1	104-3	3.4	
1	104-3	5.1	
0.3792	104-3	6.8	
0	104-3	8.5	
0	104-4	0	
0.3792	104-4	1.7	
1	104-4	3.4	
1	104-4	5.1	
0.3792	104-4	6.8	
0	104-4	8.5	
0	104-1	0	
0	104-1	1.5	
0	104-1	3	
0	104-1	4.5	
0	104-2	0	
0	104-2	1.75	
0	104-2	3.5	
0	104-3	0	
0	104-3	1.7	
0	104-3	3.4	
0	104-3	5.1	
0	104-3	6.8	
0	104-3	8.5	
0	104-4	0	
0	104-4	1.7	
0	104-4	3.4	
0	104-4	5.1	
0	104-4	6.8	
0	104-4	8.5	
0	104-1	0	
0	104-1	1.5	
0	104-1	3	
0	104-1	4.5	
0	104-2	0	
0	104-2	1.75	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	104-2	3.5	
0	104-3	0	
0	104-3	1.7	
0	104-3	3.4	
0	104-3	5.1	
0	104-3	6.8	
0	104-3	8.5	
0	104-4	0	
0	104-4	1.7	
0	104-4	3.4	
0	104-4	5.1	
0	104-4	6.8	
0	104-4	8.5	
0	104-1	0	
4	104-1	1.5	
4	104-1	3	
0	104-1	4.5	
0	104-2	0	
3	104-2	1.75	
0	104-2	3.5	
0	104-3	0	
11	104-3	1.7	
17	104-3	3.4	
17	104-3	5.1	
11	104-3	6.8	
0	104-3	8.5	
0	104-4	0	
11	104-4	1.7	
17	104-4	3.4	
17	104-4	5.1	
11	104-4	6.8	
0	104-4	8.5	
0	105-1	0	
11	105-1	1.7	
16	105-1	3.4	
16	105-1	5.1	
11	105-1	6.8	
0	105-1	8.5	
0	105-2	0	
26	105-2	1.8333	
45	105-2	3.6667	
58	105-2	5.5	
64	105-2	7.3333	
64	105-2	9.1667	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
58	105-2	11	
45	105-2	12.8333	
26	105-2	14.6667	
0	105-2	16.5	
0	105-1	0	
0.2324	105-1	1.7	
0.3485	105-1	3.4	
0.3485	105-1	5.1	
0.2324	105-1	6.8	
0	105-1	8.5	
0	105-2	0	
1	105-2	1.8333	
1	105-2	3.6667	
1	105-2	5.5	
1	105-2	7.3333	
1	105-2	9.1667	
1	105-2	11	
1	105-2	12.8333	
1	105-2	14.6667	
0	105-2	16.5	
0	105-1	0	
0.3792	105-1	1.7	
1	105-1	3.4	
1	105-1	5.1	
0.3792	105-1	6.8	
0	105-1	8.5	
0	105-2	0	
1	105-2	1.8333	
2	105-2	3.6667	
2	105-2	5.5	
2	105-2	7.3333	
2	105-2	9.1667	
2	105-2	11	
2	105-2	12.8333	
1	105-2	14.6667	
0	105-2	16.5	
0	105-1	0	
0	105-1	1.7	
0	105-1	3.4	
0	105-1	5.1	
0	105-1	6.8	
0	105-1	8.5	
0	105-2	0	
0	105-2	1.8333	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	105-2	3.6667	
0	105-2	5.5	
0	105-2	7.3333	
0	105-2	9.1667	
0	105-2	11	
0	105-2	12.8333	
0	105-2	14.6667	
0	105-2	16.5	
0	105-1	0	
0	105-1	1.7	
0	105-1	3.4	
0	105-1	5.1	
0	105-1	6.8	
0	105-1	8.5	
0	105-2	0	
0	105-2	1.8333	
0	105-2	3.6667	
0	105-2	5.5	
0	105-2	7.3333	
0	105-2	9.1667	
0	105-2	11	
0	105-2	12.8333	
0	105-2	14.6667	
0	105-2	16.5	
0	105-1	0	
11	105-1	1.7	
17	105-1	3.4	
17	105-1	5.1	
11	105-1	6.8	
0	105-1	8.5	
0	105-2	0	
26	105-2	1.8333	
46	105-2	3.6667	
59	105-2	5.5	
65	105-2	7.3333	
65	105-2	9.1667	
59	105-2	11	
46	105-2	12.8333	
26	105-2	14.6667	
0	105-2	16.5	
0	106-1	0	
33	106-1	1.95	
58	106-1	3.9	
76	106-1	5.85	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
87	106-1	7.8	
90	106-1	9.75	
87	106-1	11.7	
76	106-1	13.65	
58	106-1	15.6	
33	106-1	17.55	
0	106-1	19.5	
0	106-2	0	
6	106-2	1.8333	
6	106-2	3.6667	
0	106-2	5.5	
0	106-1	0	
1	106-1	1.95	
1	106-1	3.9	
2	106-1	5.85	
2	106-1	7.8	
2	106-1	9.75	
2	106-1	11.7	
2	106-1	13.65	
1	106-1	15.6	
1	106-1	17.55	
0	106-1	19.5	
0	106-2	0	
0.1351	106-2	1.8333	
0.1351	106-2	3.6667	
0	106-2	5.5	
0	106-1	0	
1	106-1	1.95	
2	106-1	3.9	
3	106-1	5.85	
3	106-1	7.8	
3	106-1	9.75	
3	106-1	11.7	
3	106-1	13.65	
2	106-1	15.6	
1	106-1	17.55	
0	106-1	19.5	
0	106-2	0	
0.2205	106-2	1.8333	
0.2205	106-2	3.6667	
0	106-2	5.5	
0	106-1	0	
0	106-1	1.95	
0	106-1	3.9	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	106-1	5.85	
0	106-1	7.8	
0	106-1	9.75	
0	106-1	11.7	
0	106-1	13.65	
0	106-1	15.6	
0	106-1	17.55	
0	106-1	19.5	
0	106-2	0	
0	106-2	1.8333	
0	106-2	3.6667	
0	106-2	5.5	
0	106-1	0	
0	106-1	1.95	
0	106-1	3.9	
0	106-1	5.85	
0	106-1	7.8	
0	106-1	9.75	
0	106-1	11.7	
0	106-1	13.65	
0	106-1	15.6	
0	106-1	17.55	
0	106-1	19.5	
0	106-2	0	
0	106-2	1.8333	
0	106-2	3.6667	
0	106-2	5.5	
0	106-1	0	
33	106-1	1.95	
59	106-1	3.9	
78	106-1	5.85	
89	106-1	7.8	
92	106-1	9.75	
89	106-1	11.7	
78	106-1	13.65	
59	106-1	15.6	
33	106-1	17.55	
0	106-1	19.5	
0	106-2	0	
7	106-2	1.8333	
7	106-2	3.6667	
0	106-2	5.5	
0	107-1	0	
6	107-1	1.8333	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
6	107-1	3.6667	
0	107-1	5.5	
0	107-2	0	
33	107-2	1.95	
58	107-2	3.9	
76	107-2	5.85	
87	107-2	7.8	
90	107-2	9.75	
87	107-2	11.7	
76	107-2	13.65	
58	107-2	15.6	
33	107-2	17.55	
0	107-2	19.5	
0	107-1	0	
0.1351	107-1	1.8333	
0.1351	107-1	3.6667	
0	107-1	5.5	
0	107-2	0	
1	107-2	1.95	
1	107-2	3.9	
2	107-2	5.85	
2	107-2	7.8	
2	107-2	9.75	
2	107-2	11.7	
2	107-2	13.65	
1	107-2	15.6	
1	107-2	17.55	
0	107-2	19.5	
0	107-1	0	
0.2205	107-1	1.8333	
0.2205	107-1	3.6667	
0	107-1	5.5	
0	107-2	0	
1	107-2	1.95	
2	107-2	3.9	
3	107-2	5.85	
3	107-2	7.8	
3	107-2	9.75	
3	107-2	11.7	
3	107-2	13.65	
2	107-2	15.6	
1	107-2	17.55	
0	107-2	19.5	
0	107-1	0	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	107-1	1.8333	
0	107-1	3.6667	
0	107-1	5.5	
0	107-2	0	
0	107-2	1.95	
0	107-2	3.9	
0	107-2	5.85	
0	107-2	7.8	
0	107-2	9.75	
0	107-2	11.7	
0	107-2	13.65	
0	107-2	15.6	
0	107-2	17.55	
0	107-2	19.5	
0	107-1	0	
0	107-1	1.8333	
0	107-1	3.6667	
0	107-1	5.5	
0	107-2	0	
0	107-2	1.95	
0	107-2	3.9	
0	107-2	5.85	
0	107-2	7.8	
0	107-2	9.75	
0	107-2	11.7	
0	107-2	13.65	
0	107-2	15.6	
0	107-2	17.55	
0	107-2	19.5	
0	107-1	0	
7	107-1	1.8333	
7	107-1	3.6667	
0	107-1	5.5	
0	107-2	0	
33	107-2	1.95	
59	107-2	3.9	
78	107-2	5.85	
89	107-2	7.8	
92	107-2	9.75	
89	107-2	11.7	
78	107-2	13.65	
59	107-2	15.6	
33	107-2	17.55	
0	107-2	19.5	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	150	0	
0	150	1	
0	150	0	
0	150	1	
0	150	0	
0	150	1	
0	150	0	
0	150	1	
0	150	0	
0	150	1	
0	150	0	
0	150	1	
0	151	0	
0	151	1	
0	151	0	
0	151	1	
0	151	0	
0	151	1	
0	151	0	
0	151	1	
0	151	0	
0	151	1	
0	151	0	
0	151	1	
0	151	0	
0	151	1	
0	152	0	
0	152	1	
0	152	0	
0	152	1	
0	152	0	
0	152	1	
0	152	0	
0	152	1	
0	152	0	
0	152	1	
0	152	0	
0	152	1	
0	147	0	
0	147	1	
0	147	0	
0	147	1	
0	147	0	
0	147	1	
0	147	0	
0	147	1	



Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)

M3 kip-ft	Element	Elem Station ft	Location
0	147	0	
0	147	1	
0	147	0	
0	147	1	
0	148	0	
0	148	1	
0	148	0	
0	148	1	
0	148	0	
0	148	1	
0	148	0	
0	148	1	
0	148	0	
0	148	1	
0	148	0	
0	148	1	
0	148	0	
0	148	1	
0	149	0	
0	149	1	
0	149	0	
0	149	1	
0	149	0	
0	149	1	
0	149	0	
0	149	1	
0	149	0	
0	149	1	
0	149	0	
0	149	1	
0	149	0	
0	149	1	
0.01375	114	0	
0.01994	114	1	
-0.02464	114	0	
0.02609	114	1	
-0.03455	114	0	
0.03674	114	1	
4	114	0	
-4	114	1	
-0.1985	114	0	
0.201	114	1	
-0.0109	114	0	
0.04603	114	1	
1	115	0	
1	115	1	
0.002346	115	0	
0.04216	115	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0.008515	115	0	
0.06443	115	1	
3	115	0	
-3	115	1	
-0.1573	115	0	
0.1525	115	1	
1	115	0	
1	115	1	
1	116	0	
-0.2873	116	1	
0.09286	116	0	
-0.0166	116	1	
0.1348	116	0	
-0.02469	116	1	
0.495	116	0	
-1	116	1	
3	116	0	
-4	116	1	
1	116	0	
-0.3039	116	1	
2	117	0	
1	117	1	
0.2535	117	0	
0.1823	117	1	
0.3668	117	0	
0.2628	117	1	
0.332	117	0	
-0.3399	117	1	
2	117	0	
-3	117	1	
2	117	0	
2	117	1	
0	146	0	
0	146	1	
0	146	0	
0	146	1	
0	146	0	
0	146	1	
0	146	0	
0	146	1	
0	146	0	
0	146	1	
0	146	0	
0	146	1	
0	146	0	
0	146	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	145	0	
0	145	1	
0	145	0	
0	145	1	
0	145	0	
0	145	1	
0	145	0	
0	145	1	
0	145	0	
0	145	1	
0	145	0	
0	145	1	
0	144	0	
0	144	1	
0	144	0	
0	144	1	
0	144	0	
0	144	1	
0	144	0	
0	144	1	
0	144	0	
0	144	1	
0	144	0	
0	144	1	
0	144	0	
0	144	1	
0	141	0	
0	141	1	
0	141	0	
0	141	1	
0	141	0	
0	141	1	
0	141	0	
0	141	1	
0	141	0	
0	141	1	
0	141	0	
0	141	1	
0	142	0	
0	142	1	
0	142	0	
0	142	1	
0	142	0	
0	142	1	
0	142	0	
0	142	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	142	0	
0	142	1	
0	142	0	
0	142	1	
0	143	0	
0	143	1	
0	143	0	
0	143	1	
0	143	0	
0	143	1	
0	143	0	
0	143	1	
0	143	0	
0	143	1	
0	143	0	
0	143	1	
0	143	0	
0	143	1	
0	124-1	0	
4	124-1	1.5	
4	124-1	3	
0	124-1	4.5	
0	124-2	0	
3	124-2	1.75	
0	124-2	3.5	
0	124-3	0	
11	124-3	1.7	
16	124-3	3.4	
16	124-3	5.1	
11	124-3	6.8	
0	124-3	8.5	
0	124-4	0	
11	124-4	1.7	
16	124-4	3.4	
16	124-4	5.1	
11	124-4	6.8	
0	124-4	8.5	
0	124-1	0	
1	124-1	1.5	
1	124-1	3	
0	124-1	4.5	
0	124-2	0	
0.3444	124-2	1.75	
0	124-2	3.5	
0	124-3	0	
1	124-3	1.7	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
2	124-3	3.4	
2	124-3	5.1	
1	124-3	6.8	
0	124-3	8.5	
0	124-4	0	
1	124-4	1.7	
2	124-4	3.4	
2	124-4	5.1	
1	124-4	6.8	
0	124-4	8.5	
0	124-1	0	
1	124-1	1.5	
1	124-1	3	
0	124-1	4.5	
0	124-2	0	
0.4977	124-2	1.75	
0	124-2	3.5	
0	124-3	0	
2	124-3	1.7	
3	124-3	3.4	
3	124-3	5.1	
2	124-3	6.8	
0	124-3	8.5	
0	124-4	0	
2	124-4	1.7	
3	124-4	3.4	
3	124-4	5.1	
2	124-4	6.8	
0	124-4	8.5	
0	124-1	0	
0	124-1	1.5	
0	124-1	3	
0	124-1	4.5	
0	124-2	0	
0	124-2	1.75	
0	124-2	3.5	
0	124-3	0	
0	124-3	1.7	
0	124-3	3.4	
0	124-3	5.1	
0	124-3	6.8	
0	124-3	8.5	
0	124-4	0	
0	124-4	1.7	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	124-4	3.4	
0	124-4	5.1	
0	124-4	6.8	
0	124-4	8.5	
0	124-1	0	
0	124-1	1.5	
0	124-1	3	
0	124-1	4.5	
0	124-2	0	
0	124-2	1.75	
0	124-2	3.5	
0	124-3	0	
0	124-3	1.7	
0	124-3	3.4	
0	124-3	5.1	
0	124-3	6.8	
0	124-3	8.5	
0	124-4	0	
0	124-4	1.7	
0	124-4	3.4	
0	124-4	5.1	
0	124-4	6.8	
0	124-4	8.5	
0	124-1	0	
5	124-1	1.5	
5	124-1	3	
0	124-1	4.5	
0	124-2	0	
3	124-2	1.75	
0	124-2	3.5	
0	124-3	0	
12	124-3	1.7	
18	124-3	3.4	
18	124-3	5.1	
12	124-3	6.8	
0	124-3	8.5	
0	124-4	0	
12	124-4	1.7	
18	124-4	3.4	
18	124-4	5.1	
12	124-4	6.8	
0	124-4	8.5	
0	125-1	0	
11	125-1	1.7	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
16	125-1	3.4	
16	125-1	5.1	
11	125-1	6.8	
0	125-1	8.5	
0	125-2	0	
26	125-2	1.8333	
45	125-2	3.6667	
58	125-2	5.5	
64	125-2	7.3333	
64	125-2	9.1667	
58	125-2	11	
45	125-2	12.8333	
26	125-2	14.6667	
0	125-2	16.5	
0	125-1	0	
1	125-1	1.7	
2	125-1	3.4	
2	125-1	5.1	
1	125-1	6.8	
0	125-1	8.5	
0	125-2	0	
3	125-2	1.8333	
5	125-2	3.6667	
7	125-2	5.5	
8	125-2	7.3333	
8	125-2	9.1667	
7	125-2	11	
5	125-2	12.8333	
3	125-2	14.6667	
0	125-2	16.5	
0	125-1	0	
2	125-1	1.7	
3	125-1	3.4	
3	125-1	5.1	
2	125-1	6.8	
0	125-1	8.5	
0	125-2	0	
4	125-2	1.8333	
8	125-2	3.6667	
10	125-2	5.5	
11	125-2	7.3333	
11	125-2	9.1667	
10	125-2	11	
8	125-2	12.8333	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
4	125-2	14.6667	
0	125-2	16.5	
0	125-1	0	
0	125-1	1.7	
0	125-1	3.4	
0	125-1	5.1	
0	125-1	6.8	
0	125-1	8.5	
0	125-2	0	
0	125-2	1.8333	
0	125-2	3.6667	
0	125-2	5.5	
0	125-2	7.3333	
0	125-2	9.1667	
0	125-2	11	
0	125-2	12.8333	
0	125-2	14.6667	
0	125-2	16.5	
0	125-1	0	
0	125-1	1.7	
0	125-1	3.4	
0	125-1	5.1	
0	125-1	6.8	
0	125-1	8.5	
0	125-2	0	
0	125-2	1.8333	
0	125-2	3.6667	
0	125-2	5.5	
0	125-2	7.3333	
0	125-2	9.1667	
0	125-2	11	
0	125-2	12.8333	
0	125-2	14.6667	
0	125-2	16.5	
0	125-1	0	
12	125-1	1.7	
18	125-1	3.4	
18	125-1	5.1	
12	125-1	6.8	
0	125-1	8.5	
0	125-2	0	
29	125-2	1.8333	
50	125-2	3.6667	
64	125-2	5.5	



**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
72	125-2	7.3333	
72	125-2	9.1667	
64	125-2	11	
50	125-2	12.8333	
29	125-2	14.6667	
0	125-2	16.5	
0	128	0	
0	128	1	
0	128	0	
0	128	1	
0	128	0	
0	128	1	
0	128	0	
0	128	1	
0	128	0	
0	128	1	
0	128	0	
0	128	1	
0	129	0	
0	129	1	
0	129	0	
0	129	1	
0	129	0	
0	129	1	
0	129	0	
0	129	1	
0	129	0	
0	129	1	
0	129	0	
0	129	1	
0	129	0	
0	129	1	
0	130	0	
0	130	1	
0	130	0	
0	130	1	
0	130	0	
0	130	1	
0	130	0	
0	130	1	
0	130	0	
0	130	1	
0	130	0	
0	130	1	
0	130	0	
0	130	1	
0	131	0	
0	131	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	131	0	
0	131	1	
0	131	0	
0	131	1	
0	131	0	
0	131	1	
0	131	0	
0	131	1	
0	131	0	
0	131	1	
2	133	0	
-1	133	1	
0.03725	133	0	
-0.01384	133	1	
0.06188	133	0	
-0.02386	133	1	
6	133	0	
-7	133	1	
0.1131	133	0	
-0.1317	133	1	
2	133	0	
-1	133	1	
2	134	0	
0.3263	134	1	
0.04497	134	0	
0.01049	134	1	
0.07416	134	0	
0.0163	134	1	
4	134	0	
-5	134	1	
0.07947	134	0	
-0.08446	134	1	
2	134	0	
0.3368	134	1	
0	135	0	
0	135	1	
0	135	0	
0	135	1	
0	135	0	
0	135	1	
0	135	0	
0	135	1	
0	135	0	
0	135	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	135	0	
0	135	1	
0	136	0	
0	136	1	
0	136	0	
0	136	1	
0	136	0	
0	136	1	
0	136	0	
0	136	1	
0	136	0	
0	136	1	
0	136	0	
0	136	1	
0	136	0	
0	136	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	137	0	
0	137	1	
0	138	0	
0	138	1	
0	138	0	
0	138	1	
0	138	0	
0	138	1	
0	138	0	
0	138	1	
0	138	0	
0	138	1	
0	138	0	
0	138	1	
0	139	0	
0	139	1	
0	139	0	
0	139	1	
0	139	0	
0	139	1	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
0	139	0	
0	139	1	
0	139	0	
0	139	1	
0	139	0	
0	139	1	
0	140	0	
0	140	1	
0	140	0	
0	140	1	
0	140	0	
0	140	1	
0	140	0	
0	140	1	
0	140	0	
0	140	1	
0	140	0	
0	140	1	
0	108	0	
7	108	1.9	
10	108	3.8	
10	108	5.7	
7	108	7.6	
0	108	9.5	
0	108	0	
2	108	1.9	
2	108	3.8	
2	108	5.7	
2	108	7.6	
0	108	9.5	
0	108	0	
2	108	1.9	
4	108	3.8	
4	108	5.7	
2	108	7.6	
0	108	9.5	
0	108	0	
0	108	1.9	
0	108	3.8	
0	108	5.7	
0	108	7.6	
0	108	9.5	
0	108	0	
0	108	1.9	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

<b>M3 kip-ft</b>	<b>Element</b>	<b>Elem Station ft</b>	<b>Location</b>
0	108	3.8	
0	108	5.7	
0	108	7.6	
0	108	9.5	
0	108	0	
8	108	1.9	
13	108	3.8	
13	108	5.7	
8	108	7.6	
0	108	9.5	
0	109	0	
23	109	2	
42	109	4	
57	109	6	
69	109	8	
76	109	10	
80	109	12	
80	109	14	
76	109	16	
69	109	18	
57	109	20	
42	109	22	
23	109	24	
0	109	26	
0	109	0	
5	109	2	
10	109	4	
13	109	6	
16	109	8	
18	109	10	
19	109	12	
19	109	14	
18	109	16	
16	109	18	
13	109	20	
10	109	22	
5	109	24	
0	109	26	
0	109	0	
8	109	2	
14	109	4	
20	109	6	
23	109	8	
26	109	10	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
27	109	12	
27	109	14	
26	109	16	
23	109	18	
20	109	20	
14	109	22	
8	109	24	
0	109	26	
0	109	0	
0	109	2	
0	109	4	
0	109	6	
0	109	8	
0	109	10	
0	109	12	
0	109	14	
0	109	16	
0	109	18	
0	109	20	
0	109	22	
0	109	24	
0	109	26	
0	109	0	
0	109	2	
0	109	4	
0	109	6	
0	109	8	
0	109	10	
0	109	12	
0	109	14	
0	109	16	
0	109	18	
0	109	20	
0	109	22	
0	109	24	
0	109	26	
0	109	0	
28	109	2	
52	109	4	
71	109	6	
85	109	8	
94	109	10	
99	109	12	
99	109	14	

**Table 5.5 - Element Forces - Beams (Part 2 of 2, continued)**

M3 kip-ft	Element	Elem Station ft	Location
94	109	16	
85	109	18	
71	109	20	
52	109	22	
28	109	24	
0	109	26	
0	110	0	
7	110	1.9	
10	110	3.8	
10	110	5.7	
7	110	7.6	
0	110	9.5	
0	110	0	
2	110	1.9	
2	110	3.8	
2	110	5.7	
2	110	7.6	
0	110	9.5	
0	110	0	
2	110	1.9	
4	110	3.8	
4	110	5.7	
2	110	7.6	
0	110	9.5	
0	110	0	
0	110	1.9	
0	110	3.8	
0	110	5.7	
0	110	7.6	
0	110	9.5	
0	110	0	
0	110	1.9	
0	110	3.8	
0	110	5.7	
0	110	7.6	
0	110	9.5	
0	110	0	
8	110	1.9	
13	110	3.8	
13	110	5.7	
8	110	7.6	
0	110	9.5	

Table 5.6 - Pier Forces

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	PyL-01	Self Weight	LinStatic	Top	-24	-0.2027	-0.00266	0.02039	0.002448	9
Story1	PyL-01	Self Weight	LinStatic	Bottom	-29	-6	-0.00266	0.02039	-0.05076	9
Story1	PyL-01	Super Dead	LinStatic	Top	-1	1	0.0001628	0.0003178	-0.003099	-6
Story1	PyL-01	Super Dead	LinStatic	Bottom	-1	1	0.0001628	0.0003178	0.0001568	5
Story1	PyL-01	Live	LinStatic	Top	-2	1	0.0002158	0.0005443	-0.00434	-8
Story1	PyL-01	Live	LinStatic	Bottom	-1	1	0.0002158	0.0005443	-2.36E-05	7
Story1	PyL-01	EQX	LinStatic	Top	-9	16	0.004991	-0.03281	-0.02708	-59
Story1	PyL-01	EQX	LinStatic	Bottom	20	19	0.004991	-0.03281	0.07274	74
Story1	PyL-01	EQY	LinStatic	Top	-2	2	0.001598	-0.004105	-0.007004	-14
Story1	PyL-01	EQY	LinStatic	Bottom	-0.4288	2	0.001598	-0.004105	0.02496	14
Story1	PyL-01	Dead	Combination	Top	-26	1	-0.002498	0.02071	-0.0006508	3
Story1	PyL-01	Dead	Combination	Bottom	-30	-5	-0.002498	0.02071	-0.0506	13
Story1	PyL-02	Self Weight	LinStatic	Top	-48	-2	0	-0.0006234	0	0
Story1	PyL-02	Self Weight	LinStatic	Bottom	-44	-7	0	-0.0006234	0	6
Story1	PyL-02	Super Dead	LinStatic	Top	-1	0.4957	0	0.0003644	0	0
Story1	PyL-02	Super Dead	LinStatic	Bottom	-2	0.4833	0	0.0003644	0	-1
Story1	PyL-02	Live	LinStatic	Top	-2	1	0	0.0005088	0	0
Story1	PyL-02	Live	LinStatic	Bottom	-2	1	0	0.0005088	0	-2
Story1	PyL-02	EQX	LinStatic	Top	0	45	0	-0.0186	0	0
Story1	PyL-02	EQX	LinStatic	Bottom	-1	36	0	-0.0186	0	89
Story1	PyL-02	EQY	LinStatic	Top	0	0.4182	0	0.004114	0	0
Story1	PyL-02	EQY	LinStatic	Bottom	-2	1	0	0.004114	0	-8
Story1	PyL-02	Dead	Combination	Top	-49	-2	0	-0.000259	0	0
Story1	PyL-02	Dead	Combination	Bottom	-46	-6	0	-0.000259	0	4
Story1	PyL-03	Self Weight	LinStatic	Top	-48	-3	0	-0.0006234	0	0
Story1	PyL-03	Self Weight	LinStatic	Bottom	-46	-7	0	-0.0006234	0	2
Story1	PyL-03	Super Dead	LinStatic	Top	-1	-0.01759	0	0.0003644	0	0
Story1	PyL-03	Super Dead	LinStatic	Bottom	-1	-0.02056	0	0.0003644	0	-1
Story1	PyL-03	Live	LinStatic	Top	-2	-0.03772	0	0.0005088	0	0
Story1	PyL-03	Live	LinStatic	Bottom	-2	-0.0637	0	0.0005088	0	-1
Story1	PyL-03	EQX	LinStatic	Top	0	23	0	-0.0186	0	0
Story1	PyL-03	EQX	LinStatic	Bottom	-27	28	0	-0.0186	0	109
Story1	PyL-03	EQY	LinStatic	Top	0	-1	0	0.004114	0	0
Story1	PyL-03	EQY	LinStatic	Bottom	0.1959	-0.4524	0	0.004114	0	-7
Story1	PyL-03	Dead	Combination	Top	-49	-3	0	-0.000259	0	0
Story1	PyL-03	Dead	Combination	Bottom	-47	-7	0	-0.000259	0	1
Story1	PyL-04	Self Weight	LinStatic	Top	-48	-14	-9.792E-06	-0.0006228	0	0.06367
Story1	PyL-04	Self Weight	LinStatic	Bottom	-48	-3	8.926E-06	-0.0003549	0	-149
Story1	PyL-04	Super Dead	LinStatic	Top	-1	-0.4031	5.725E-06	0.0003641	0	1
Story1	PyL-04	Super Dead	LinStatic	Bottom	-1	-0.1295	-5.218E-06	0.0002075	0	-4
Story1	PyL-04	Live	LinStatic	Top	-2	-1	7.993E-06	0.0005083	0	1
Story1	PyL-04	Live	LinStatic	Bottom	-2	-0.1986	-7.286E-06	0.0002897	0	-6
Story1	PyL-04	EQX	LinStatic	Top	8	13	-0.0002921	-0.01858	-1.214E-05	-100
Story1	PyL-04	EQX	LinStatic	Bottom	14	13	0.0002663	-0.01059	0	74
Story1	PyL-04	EQY	LinStatic	Top	-0.3995	-1	6.462E-05	0.00411	2.686E-06	5



Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	PyL-04	EQY	LinStatic	Bottom	-1	-1	-5.89E-05	0.002342	0	-4
Story1	PyL-04	Dead	Combination	Top	-49	-14	0	-0.0002587	0	1
Story1	PyL-04	Dead	Combination	Bottom	-49	-4	0	-0.0001474	0	-153
Story1	PyL-05	Self Weight	LinStatic	Top	-48	14	9.792E-06	-0.0006228	0	0.09736
Story1	PyL-05	Self Weight	LinStatic	Bottom	-48	3	-8.926E-06	-0.0003549	0	149
Story1	PyL-05	Super Dead	LinStatic	Top	-1	0.2104	-5.725E-06	0.0003641	0	1
Story1	PyL-05	Super Dead	LinStatic	Bottom	-1	-0.02167	5.218E-06	0.0002075	0	3
Story1	PyL-05	Live	LinStatic	Top	-2	0.3622	-7.993E-06	0.0005083	0	1
Story1	PyL-05	Live	LinStatic	Bottom	-2	-0.01471	7.286E-06	0.0002897	0	4
Story1	PyL-05	EQX	LinStatic	Top	-8	12	0.0002921	-0.01858	1.214E-05	-100
Story1	PyL-05	EQX	LinStatic	Bottom	-14	14	-0.0002663	-0.01059	0	74
Story1	PyL-05	EQY	LinStatic	Top	0.3995	-1	-6.462E-05	0.00411	-2.686E-06	5
Story1	PyL-05	EQY	LinStatic	Bottom	1	-1	5.89E-05	0.002342	0	-4
Story1	PyL-05	Dead	Combination	Top	-49	14	0	-0.0002587	0	1
Story1	PyL-05	Dead	Combination	Bottom	-48	3	0	-0.0001474	0	152
Story1	PyL-06	Self Weight	LinStatic	Top	-48	2	0	-0.0006234	0	0
Story1	PyL-06	Self Weight	LinStatic	Bottom	-48	6	0	-0.0006234	0	-0.2972
Story1	PyL-06	Super Dead	LinStatic	Top	-1	-0.1214	0	0.0003644	0	0
Story1	PyL-06	Super Dead	LinStatic	Bottom	-1	-0.0781	0	0.0003644	0	-1
Story1	PyL-06	Live	LinStatic	Top	-2	-0.1632	0	0.0005088	0	0
Story1	PyL-06	Live	LinStatic	Bottom	-2	-0.08151	0	0.0005088	0	-1
Story1	PyL-06	EQX	LinStatic	Top	0	24	0	-0.0186	0	0
Story1	PyL-06	EQX	LinStatic	Bottom	32	31	0	-0.0186	0	105
Story1	PyL-06	EQY	LinStatic	Top	0	-1	0	0.004114	0	0
Story1	PyL-06	EQY	LinStatic	Bottom	-2	-2	0	0.004114	0	-5
Story1	PyL-06	Dead	Combination	Top	-49	1	0	-0.000259	0	0
Story1	PyL-06	Dead	Combination	Bottom	-49	6	0	-0.000259	0	-1
Story1	PyL-07	Self Weight	LinStatic	Top	-48	-0.2243	0	-0.0006234	0	0
Story1	PyL-07	Self Weight	LinStatic	Bottom	-48	-0.3831	0	-0.0006234	0	0.2305
Story1	PyL-07	Super Dead	LinStatic	Top	-1	-0.3706	0	0.0003644	0	0
Story1	PyL-07	Super Dead	LinStatic	Bottom	-1	-0.3178	0	0.0003644	0	-0.4892
Story1	PyL-07	Live	LinStatic	Top	-2	-1	0	0.0005088	0	0
Story1	PyL-07	Live	LinStatic	Bottom	-2	-0.4481	0	0.0005088	0	-1
Story1	PyL-07	EQX	LinStatic	Top	0	56	0	-0.0186	0	0
Story1	PyL-07	EQX	LinStatic	Bottom	9	47	0	-0.0186	0	76
Story1	PyL-07	EQY	LinStatic	Top	0	-3	0	0.004114	0	0
Story1	PyL-07	EQY	LinStatic	Bottom	-0.482	-2	0	0.004114	0	-4
Story1	PyL-07	Dead	Combination	Top	-49	-1	0	-0.000259	0	0
Story1	PyL-07	Dead	Combination	Bottom	-49	-1	0	-0.000259	0	-0.2587
Story1	PyL-08	Self Weight	LinStatic	Top	-48	0.1911	0	-0.0006234	0	0
Story1	PyL-08	Self Weight	LinStatic	Bottom	-48	-1	0	-0.0006234	0	0.2711
Story1	PyL-08	Super Dead	LinStatic	Top	-1	-0.3649	0	0.0003644	0	0
Story1	PyL-08	Super Dead	LinStatic	Bottom	-1	-0.3266	0	0.0003644	0	-0.4882
Story1	PyL-08	Live	LinStatic	Top	-2	-1	0	0.0005088	0	0

Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	PyL-08	Live	LinStatic	Bottom	-2	-0.4623	0	0.0005088	0	-1
Story1	PyL-08	EQX	LinStatic	Top	0	56	0	-0.0186	0	0
Story1	PyL-08	EQX	LinStatic	Bottom	-9	48	0	-0.0186	0	76
Story1	PyL-08	EQY	LinStatic	Top	0	-3	0	0.004114	0	0
Story1	PyL-08	EQY	LinStatic	Bottom	0.4829	-2	0	0.004114	0	-4
Story1	PyL-08	Dead	Combination	Top	-49	-0.1737	0	-0.000259	0	0
Story1	PyL-08	Dead	Combination	Bottom	-49	-1	0	-0.000259	0	-0.2171
Story1	PyL-09	Self Weight	LinStatic	Top	-48	-5	0	-0.0006234	0	0
Story1	PyL-09	Self Weight	LinStatic	Bottom	-47	7	0	-0.0006234	0	-0.1277
Story1	PyL-09	Super Dead	LinStatic	Top	-1	-0.2495	0	0.0003644	0	0
Story1	PyL-09	Super Dead	LinStatic	Bottom	-1	-0.05224	0	0.0003644	0	-1
Story1	PyL-09	Live	LinStatic	Top	-2	-0.3736	0	0.0005088	0	0
Story1	PyL-09	Live	LinStatic	Bottom	-1	-0.03906	0	0.0005088	0	-1
Story1	PyL-09	EQX	LinStatic	Top	0	23	0	-0.0186	0	0
Story1	PyL-09	EQX	LinStatic	Bottom	-32	31	0	-0.0186	0	105
Story1	PyL-09	EQY	LinStatic	Top	0	-1	0	0.004114	0	0
Story1	PyL-09	EQY	LinStatic	Bottom	2	-2	0	0.004114	0	-5
Story1	PyL-09	Dead	Combination	Top	-49	-5	0	-0.000259	0	0
Story1	PyL-09	Dead	Combination	Bottom	-48	7	0	-0.000259	0	-1
Story1	PyA-01	Self Weight	LinStatic	Top	-26	1	0	-0.0003342	0	0
Story1	PyA-01	Self Weight	LinStatic	Bottom	-30	-5	0	-0.0003342	0	14
Story1	PyA-01	Super Dead	LinStatic	Top	-1	0.02011	0	0.0001954	0	0
Story1	PyA-01	Super Dead	LinStatic	Bottom	-1	-0.1131	0	0.0001954	0	0.2841
Story1	PyA-01	Live	LinStatic	Top	-1	0.03359	0	0.0002728	0	0
Story1	PyA-01	Live	LinStatic	Bottom	-1	-0.1829	0	0.0002728	0	0.4653
Story1	PyA-01	EQX	LinStatic	Top	0	4	0	-0.009971	0	0
Story1	PyA-01	EQX	LinStatic	Bottom	18	9	0	-0.009971	0	9
Story1	PyA-01	EQY	LinStatic	Top	0	0.07956	0	0.002206	0	0
Story1	PyA-01	EQY	LinStatic	Bottom	0.3306	0.177	0	0.002206	0	0.1722
Story1	PyA-01	Dead	Combination	Top	-26	1	0	-0.0001388	0	0
Story1	PyA-01	Dead	Combination	Bottom	-31	-5	0	-0.0001388	0	14
Story1	PyA-02	Self Weight	LinStatic	Top	-48	-2	0	-0.0006234	0	0
Story1	PyA-02	Self Weight	LinStatic	Bottom	-46	-7	0	-0.0006234	0	4
Story1	PyA-02	Super Dead	LinStatic	Top	-1	-0.0668	0	0.0003644	0	0
Story1	PyA-02	Super Dead	LinStatic	Bottom	-1	-0.1685	0	0.0003644	0	0.04048
Story1	PyA-02	Live	LinStatic	Top	-2	-0.1026	0	0.0005088	0	0
Story1	PyA-02	Live	LinStatic	Bottom	-2	-0.2689	0	0.0005088	0	0.07612
Story1	PyA-02	EQX	LinStatic	Top	0	35	0	-0.0186	0	0
Story1	PyA-02	EQX	LinStatic	Bottom	14	33	0	-0.0186	0	55
Story1	PyA-02	EQY	LinStatic	Top	0	1	0	0.004114	0	0
Story1	PyA-02	EQY	LinStatic	Bottom	0.2552	1	0	0.004114	0	1
Story1	PyA-02	Dead	Combination	Top	-49	-2	0	-0.000259	0	0
Story1	PyA-02	Dead	Combination	Bottom	-47	-7	0	-0.000259	0	4
Story1	PyA-03	Self Weight	LinStatic	Top	-48	-2	0	-0.0006234	0	0

Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	PyA-03	Self Weight	LinStatic	Bottom	-47	-2	0	-0.0006234	0	1
Story1	PyA-03	Super Dead	LinStatic	Top	-1	-0.08783	0	0.0003644	0	0
Story1	PyA-03	Super Dead	LinStatic	Bottom	-1	-0.07961	0	0.0003644	0	-0.00849
Story1	PyA-03	Live	LinStatic	Top	-2	-0.135	0	0.0005088	0	0
Story1	PyA-03	Live	LinStatic	Bottom	-2	-0.1223	0	0.0005088	0	-0.005745
Story1	PyA-03	EQX	LinStatic	Top	0	46	0	-0.0186	0	0
Story1	PyA-03	EQX	LinStatic	Bottom	2	42	0	-0.0186	0	45
Story1	PyA-03	EQY	LinStatic	Top	0	1	0	0.004114	0	0
Story1	PyA-03	EQY	LinStatic	Bottom	0.03473	1	0	0.004114	0	1
Story1	PyA-03	Dead	Combination	Top	-49	-3	0	-0.000259	0	0
Story1	PyA-03	Dead	Combination	Bottom	-48	-2	0	-0.000259	0	1
Story1	PyA-04	Self Weight	LinStatic	Top	-48	-1	0	-0.0006234	0	0
Story1	PyA-04	Self Weight	LinStatic	Bottom	-47	-1	0	-0.0006234	0	0.1753
Story1	PyA-04	Super Dead	LinStatic	Top	-1	-0.06023	0	0.0003644	0	0
Story1	PyA-04	Super Dead	LinStatic	Bottom	-1	-0.06046	0	0.0003644	0	-0.036
Story1	PyA-04	Live	LinStatic	Top	-2	-0.09043	0	0.0005088	0	0
Story1	PyA-04	Live	LinStatic	Bottom	-2	-0.09204	0	0.0005088	0	-0.04971
Story1	PyA-04	EQX	LinStatic	Top	0	43	0	-0.0186	0	0
Story1	PyA-04	EQX	LinStatic	Bottom	-9	36	0	-0.0186	0	50
Story1	PyA-04	EQY	LinStatic	Top	0	1	0	0.004114	0	0
Story1	PyA-04	EQY	LinStatic	Bottom	-0.1706	1	0	0.004114	0	1
Story1	PyA-04	Dead	Combination	Top	-49	-1	0	-0.000259	0	0
Story1	PyA-04	Dead	Combination	Bottom	-48	-2	0	-0.000259	0	0.1393
Story1	PyA-05	Self Weight	LinStatic	Top	-48	-1	0	-0.0006234	0	0
Story1	PyA-05	Self Weight	LinStatic	Bottom	-47	2	0	-0.0006234	0	-1
Story1	PyA-05	Super Dead	LinStatic	Top	-1	-0.03194	0	0.0003644	0	0
Story1	PyA-05	Super Dead	LinStatic	Bottom	-1	0.01688	0	0.0003644	0	-0.07801
Story1	PyA-05	Live	LinStatic	Top	-2	-0.05001	0	0.0005088	0	0
Story1	PyA-05	Live	LinStatic	Bottom	-2	0.03293	0	0.0005088	0	-0.114
Story1	PyA-05	EQX	LinStatic	Top	0	12	0	-0.0186	0	0
Story1	PyA-05	EQX	LinStatic	Bottom	-24	30	0	-0.0186	0	73
Story1	PyA-05	EQY	LinStatic	Top	0	0.217	0	0.004114	0	0
Story1	PyA-05	EQY	LinStatic	Bottom	-0.45	1	0	0.004114	0	1
Story1	PyA-05	Dead	Combination	Top	-49	-1	0	-0.000259	0	0
Story1	PyA-05	Dead	Combination	Bottom	-48	2	0	-0.000259	0	-1
Story1	PyA-06	Self Weight	LinStatic	Top	-45	-23	-9.663E-06	-0.0004261	0	-38
Story1	PyA-06	Self Weight	LinStatic	Bottom	-43	-13	7.971E-06	-0.0001673	0	-268
Story1	PyA-06	Super Dead	LinStatic	Top	-1	-1	5.649E-06	0.0002491	0	-1
Story1	PyA-06	Super Dead	LinStatic	Bottom	-1	-0.2813	0	9.779E-05	0	-6
Story1	PyA-06	Live	LinStatic	Top	-2	-1	7.887E-06	0.0003478	0	-1
Story1	PyA-06	Live	LinStatic	Bottom	-1	-0.4556	-6.506E-06	0.0001365	0	-9
Story1	PyA-06	EQX	LinStatic	Top	13	34	-0.0002883	-0.01271	-1.31E-05	-169
Story1	PyA-06	EQX	LinStatic	Bottom	22	19	0.0002378	-0.00499	0	185
Story1	PyA-06	EQY	LinStatic	Top	0.2448	1	6.376E-05	0.002812	2.898E-06	-3

Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	PyA-06	EQY	LinStatic	Bottom	0.4088	0.3592	-5.26E-05	0.001104	0	3
Story1	PyA-06	Dead	Combination	Top	-46	-23	0	-0.000177	0	-39
Story1	PyA-06	Dead	Combination	Bottom	-44	-13	0	-6.949E-05	0	-273
Story1	PyA-07	Self Weight	LinStatic	Top	-50	33	9.663E-06	-0.0006186	0	-37
Story1	PyA-07	Self Weight	LinStatic	Bottom	-52	23	-7.971E-06	-0.0003555	0	318
Story1	PyA-07	Super Dead	LinStatic	Top	-1	1	-5.649E-06	0.0003616	0	-1
Story1	PyA-07	Super Dead	LinStatic	Bottom	-1	0.4522	0	0.0002078	0	7
Story1	PyA-07	Live	LinStatic	Top	-2	1	-7.887E-06	0.0005049	0	-1
Story1	PyA-07	Live	LinStatic	Bottom	-2	1	6.506E-06	0.0002902	0	11
Story1	PyA-07	EQX	LinStatic	Top	-13	25	0.0002883	-0.01845	1.31E-05	-170
Story1	PyA-07	EQX	LinStatic	Bottom	-22	31	-0.0002378	-0.01061	0	196
Story1	PyA-07	EQY	LinStatic	Top	-0.2448	0.4688	-6.376E-05	0.004082	-2.898E-06	-3
Story1	PyA-07	EQY	LinStatic	Bottom	-0.4088	1	5.26E-05	0.002346	0	4
Story1	PyA-07	Dead	Combination	Top	-52	33	0	-0.000257	0	-38
Story1	PyA-07	Dead	Combination	Bottom	-54	23	0	-0.0001477	0	325
Story1	PyA-08	Self Weight	LinStatic	Top	-48	3	0	-0.0006234	0	0
Story1	PyA-08	Self Weight	LinStatic	Bottom	-48	-1	0	-0.0006234	0	-1
Story1	PyA-08	Super Dead	LinStatic	Top	-1	0.04658	0	0.0003644	0	0
Story1	PyA-08	Super Dead	LinStatic	Bottom	-1	-0.03968	0	0.0003644	0	-0.08144
Story1	PyA-08	Live	LinStatic	Top	-2	0.07911	0	0.0005088	0	0
Story1	PyA-08	Live	LinStatic	Bottom	-2	-0.06066	0	0.0005088	0	-0.1196
Story1	PyA-08	EQX	LinStatic	Top	0	17	0	-0.0186	0	0
Story1	PyA-08	EQX	LinStatic	Bottom	24	23	0	-0.0186	0	73
Story1	PyA-08	EQY	LinStatic	Top	0	0.3197	0	0.004114	0	0
Story1	PyA-08	EQY	LinStatic	Bottom	0.458	0.4222	0	0.004114	0	1
Story1	PyA-08	Dead	Combination	Top	-49	3	0	-0.000259	0	0
Story1	PyA-08	Dead	Combination	Bottom	-49	-1	0	-0.000259	0	-1
Story1	PyA-09	Self Weight	LinStatic	Top	-48	-3	0	-0.0006234	0	0
Story1	PyA-09	Self Weight	LinStatic	Bottom	-48	2	0	-0.0006234	0	-1
Story1	PyA-09	Super Dead	LinStatic	Top	-1	-0.08974	0	0.0003644	0	0
Story1	PyA-09	Super Dead	LinStatic	Bottom	-1	0.01021	0	0.0003644	0	-0.06699
Story1	PyA-09	Live	LinStatic	Top	-2	-0.1391	0	0.0005088	0	0
Story1	PyA-09	Live	LinStatic	Bottom	-2	0.0251	0	0.0005088	0	-0.1006
Story1	PyA-09	EQX	LinStatic	Top	0	40	0	-0.0186	0	0
Story1	PyA-09	EQX	LinStatic	Bottom	10	46	0	-0.0186	0	48
Story1	PyA-09	EQY	LinStatic	Top	0	1	0	0.004114	0	0
Story1	PyA-09	EQY	LinStatic	Bottom	0.1829	1	0	0.004114	0	1
Story1	PyA-09	Dead	Combination	Top	-49	-3	0	-0.000259	0	0
Story1	PyA-09	Dead	Combination	Bottom	-49	2	0	-0.000259	0	-1
Story1	PyA-10	Self Weight	LinStatic	Top	-48	-1	0	-0.0004832	0	0
Story1	PyA-10	Self Weight	LinStatic	Bottom	-46	-2	0	-0.0004832	0	-91
Story1	PyA-10	Super Dead	LinStatic	Top	-1	-0.05727	0	0.0002825	0	0
Story1	PyA-10	Super Dead	LinStatic	Bottom	-1	-0.06691	0	0.0002825	0	-2
Story1	PyA-10	Live	LinStatic	Top	-2	-0.08408	0	0.0003944	0	0

Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	PyA-10	Live	LinStatic	Bottom	-2	-0.103	0	0.0003944	0	-3
Story1	PyA-10	EQX	LinStatic	Top	0	52	0	-0.01441	0	0
Story1	PyA-10	EQX	LinStatic	Bottom	3	34	0	-0.01441	0	34
Story1	PyA-10	EQY	LinStatic	Top	0	1	0	0.003188	0	0
Story1	PyA-10	EQY	LinStatic	Bottom	0.04839	1	0	0.003188	0	1
Story1	PyA-10	Dead	Combination	Top	-49	-1	0	-0.0002007	0	0
Story1	PyA-10	Dead	Combination	Bottom	-47	-2	0	-0.0002007	0	-93
Story1	PyA-11	Self Weight	LinStatic	Top	-48	5	0	-0.0006234	0	0
Story1	PyA-11	Self Weight	LinStatic	Bottom	-47	1	0	-0.0006234	0	-3
Story1	PyA-11	Super Dead	LinStatic	Top	-1	0.05988	0	0.0003644	0	0
Story1	PyA-11	Super Dead	LinStatic	Bottom	-1	-0.01195	0	0.0003644	0	-0.09268
Story1	PyA-11	Live	LinStatic	Top	-2	0.1064	0	0.0005088	0	0
Story1	PyA-11	Live	LinStatic	Bottom	-2	-0.01042	0	0.0005088	0	-0.144
Story1	PyA-11	EQX	LinStatic	Top	0	48	0	-0.0186	0	0
Story1	PyA-11	EQX	LinStatic	Bottom	-4	50	0	-0.0186	0	40
Story1	PyA-11	EQY	LinStatic	Top	0	1	0	0.004114	0	0
Story1	PyA-11	EQY	LinStatic	Bottom	-0.07584	1	0	0.004114	0	1
Story1	PyA-11	Dead	Combination	Top	-49	5	0	-0.000259	0	0
Story1	PyA-11	Dead	Combination	Bottom	-48	1	0	-0.000259	0	-3
Story1	PyA-13	Self Weight	LinStatic	Top	-26	-1	0	-0.0003342	0	0
Story1	PyA-13	Self Weight	LinStatic	Bottom	-30	5	0	-0.0003342	0	-14
Story1	PyA-13	Super Dead	LinStatic	Top	-1	-0.0289	0	0.0001954	0	0
Story1	PyA-13	Super Dead	LinStatic	Bottom	-1	0.09654	0	0.0001954	0	-0.3064
Story1	PyA-13	Live	LinStatic	Top	-1	-0.04625	0	0.0002728	0	0
Story1	PyA-13	Live	LinStatic	Bottom	-1	0.1594	0	0.0002728	0	-0.4984
Story1	PyA-13	EQX	LinStatic	Top	0	5	0	-0.009971	0	0
Story1	PyA-13	EQX	LinStatic	Bottom	-18	10	0	-0.009971	0	9
Story1	PyA-13	EQY	LinStatic	Top	0	0.09386	0	0.002206	0	0
Story1	PyA-13	EQY	LinStatic	Bottom	-0.3398	0.192	0	0.002206	0	0.1658
Story1	PyA-13	Dead	Combination	Top	-26	-1	0	-0.0001388	0	0
Story1	PyA-13	Dead	Combination	Bottom	-30	5	0	-0.0001388	0	-14
Story1	PyA-12	Self Weight	LinStatic	Top	-48	1	0	-0.0006234	0	0
Story1	PyA-12	Self Weight	LinStatic	Bottom	-45	6	0	-0.0006234	0	-6
Story1	PyA-12	Super Dead	LinStatic	Top	-1	-0.01323	0	0.0003644	0	0
Story1	PyA-12	Super Dead	LinStatic	Bottom	-1	0.1002	0	0.0003644	0	-0.1678
Story1	PyA-12	Live	LinStatic	Top	-2	-0.01489	0	0.0005088	0	0
Story1	PyA-12	Live	LinStatic	Bottom	-2	0.1697	0	0.0005088	0	-0.264
Story1	PyA-12	EQX	LinStatic	Top	0	37	0	-0.0186	0	0
Story1	PyA-12	EQX	LinStatic	Bottom	-15	35	0	-0.0186	0	54
Story1	PyA-12	EQY	LinStatic	Top	0	1	0	0.004114	0	0
Story1	PyA-12	EQY	LinStatic	Bottom	-0.2736	1	0	0.004114	0	1
Story1	PyA-12	Dead	Combination	Top	-49	1	0	-0.000259	0	0
Story1	PyA-12	Dead	Combination	Bottom	-46	6	0	-0.000259	0	-6
Story1	Px1-02	Self Weight	LinStatic	Top	-46	5	0	-0.0005985	0	0

Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	Px1-02	Self Weight	LinStatic	Bottom	-46	-7	0	-0.0005985	0	13
Story1	Px1-02	Super Dead	LinStatic	Top	-5	1	0	0.0003499	0	0
Story1	Px1-02	Super Dead	LinStatic	Bottom	-5	-1	0	0.0003499	0	2
Story1	Px1-02	Live	LinStatic	Top	-8	1	0	0.0004885	0	0
Story1	Px1-02	Live	LinStatic	Bottom	-8	-1	0	0.0004885	0	3
Story1	Px1-02	EQX	LinStatic	Top	0	-4	0	-0.01785	0	0
Story1	Px1-02	EQX	LinStatic	Bottom	-6	-6	0	-0.01785	0	-18
Story1	Px1-02	EQY	LinStatic	Top	0	23	0	0.003949	0	0
Story1	Px1-02	EQY	LinStatic	Bottom	38	34	0	0.003949	0	107
Story1	Px1-02	Dead	Combination	Top	-51	5	0	-0.0002486	0	0
Story1	Px1-02	Dead	Combination	Bottom	-51	-7	0	-0.0002486	0	15
Story1	Px1-03	Self Weight	LinStatic	Top	-49	1	0	-0.0006483	0	0
Story1	Px1-03	Self Weight	LinStatic	Bottom	-48	1	0	-0.0006483	0	14
Story1	Px1-03	Super Dead	LinStatic	Top	-6	0.3187	0	0.000379	0	0
Story1	Px1-03	Super Dead	LinStatic	Bottom	-6	0.2893	0	0.000379	0	2
Story1	Px1-03	Live	LinStatic	Top	-8	0.4527	0	0.0005292	0	0
Story1	Px1-03	Live	LinStatic	Bottom	-8	0.4115	0	0.0005292	0	3
Story1	Px1-03	EQX	LinStatic	Top	0	-11	0	-0.01934	0	0
Story1	Px1-03	EQX	LinStatic	Bottom	-2	-10	0	-0.01934	0	-16
Story1	Px1-03	EQY	LinStatic	Top	0	67	0	0.004278	0	0
Story1	Px1-03	EQY	LinStatic	Bottom	11	57	0	0.004278	0	93
Story1	Px1-03	Dead	Combination	Top	-55	1	0	-0.0002693	0	0
Story1	Px1-03	Dead	Combination	Bottom	-54	1	0	-0.0002693	0	16
Story1	Px1-04	Self Weight	LinStatic	Top	-48	2	0	-0.0006234	0	0
Story1	Px1-04	Self Weight	LinStatic	Bottom	-50	-1	0	-0.0006234	0	7
Story1	Px1-04	Super Dead	LinStatic	Top	-6	0.4349	0	0.0003644	0	0
Story1	Px1-04	Super Dead	LinStatic	Bottom	-6	-0.03504	0	0.0003644	0	1
Story1	Px1-04	Live	LinStatic	Top	-8	1	0	0.0005088	0	0
Story1	Px1-04	Live	LinStatic	Bottom	-9	-0.05703	0	0.0005088	0	2
Story1	Px1-04	EQX	LinStatic	Top	0	-11	0	-0.0186	0	0
Story1	Px1-04	EQX	LinStatic	Bottom	2	-9	0	-0.0186	0	-15
Story1	Px1-04	EQY	LinStatic	Top	0	67	0	0.004114	0	0
Story1	Px1-04	EQY	LinStatic	Bottom	-11	55	0	0.004114	0	87
Story1	Px1-04	Dead	Combination	Top	-53	2	0	-0.000259	0	0
Story1	Px1-04	Dead	Combination	Bottom	-56	-1	0	-0.000259	0	8
Story1	Px1-05	Self Weight	LinStatic	Top	-53	-12	0	-0.0006982	0	0
Story1	Px1-05	Self Weight	LinStatic	Bottom	-52	8	0	-0.0006982	0	-13
Story1	Px1-05	Super Dead	LinStatic	Top	-6	-2	0	0.0004082	0	0
Story1	Px1-05	Super Dead	LinStatic	Bottom	-6	1	0	0.0004082	0	-1
Story1	Px1-05	Live	LinStatic	Top	-9	-3	0	0.0005699	0	0
Story1	Px1-05	Live	LinStatic	Bottom	-9	2	0	0.0005699	0	-2
Story1	Px1-05	EQX	LinStatic	Top	0	-4	0	-0.02083	0	0
Story1	Px1-05	EQX	LinStatic	Bottom	6	-7	0	-0.02083	0	-23
Story1	Px1-05	EQY	LinStatic	Top	0	22	0	0.004607	0	0

Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	Px1-05	EQY	LinStatic	Bottom	-38	43	0	0.004607	0	136
Story1	Px1-05	Dead	Combination	Top	-60	-13	0	-0.0002901	0	0
Story1	Px1-05	Dead	Combination	Bottom	-58	9	0	-0.0002901	0	-14
Story1	Px1-07	Self Weight	LinStatic	Top	-53	11	0	-0.0006982	0	0
Story1	Px1-07	Self Weight	LinStatic	Bottom	-51	-6	0	-0.0006982	0	30
Story1	Px1-07	Super Dead	LinStatic	Top	-6	2	0	0.0004082	0	0
Story1	Px1-07	Super Dead	LinStatic	Bottom	-6	-1	0	0.0004082	0	4
Story1	Px1-07	Live	LinStatic	Top	-9	3	0	0.0005699	0	0
Story1	Px1-07	Live	LinStatic	Bottom	-9	-1	0	0.0005699	0	6
Story1	Px1-07	EQX	LinStatic	Top	0	-3	0	-0.02083	0	0
Story1	Px1-07	EQX	LinStatic	Bottom	-6	-7	0	-0.02083	0	-24
Story1	Px1-07	EQY	LinStatic	Top	0	18	0	0.004607	0	0
Story1	Px1-07	EQY	LinStatic	Bottom	34	39	0	0.004607	0	142
Story1	Px1-07	Dead	Combination	Top	-60	13	0	-0.0002901	0	0
Story1	Px1-07	Dead	Combination	Bottom	-57	-7	0	-0.0002901	0	34
Story1	Px1-08	Self Weight	LinStatic	Top	-48	7	0	-0.0006234	0	0
Story1	Px1-08	Self Weight	LinStatic	Bottom	-55	-8	0	-0.0006234	0	10
Story1	Px1-08	Super Dead	LinStatic	Top	-6	1	0	0.0003644	0	0
Story1	Px1-08	Super Dead	LinStatic	Bottom	-6	-1	0	0.0003644	0	1
Story1	Px1-08	Live	LinStatic	Top	-8	1	0	0.0005088	0	0
Story1	Px1-08	Live	LinStatic	Bottom	-9	-1	0	0.0005088	0	2
Story1	Px1-08	EQX	LinStatic	Top	0	-11	0	-0.0186	0	0
Story1	Px1-08	EQX	LinStatic	Bottom	-1	-7	0	-0.0186	0	-17
Story1	Px1-08	EQY	LinStatic	Top	0	65	0	0.004114	0	0
Story1	Px1-08	EQY	LinStatic	Bottom	4	41	0	0.004114	0	98
Story1	Px1-08	Dead	Combination	Top	-53	8	0	-0.000259	0	0
Story1	Px1-08	Dead	Combination	Bottom	-61	-9	0	-0.000259	0	11
Story1	Px1-09	Self Weight	LinStatic	Top	-75	-23	0	-0.0009816	0	0
Story1	Px1-09	Self Weight	LinStatic	Bottom	-70	7	0	-0.0009816	0	-68
Story1	Px1-09	Super Dead	LinStatic	Top	-9	-3	0	0.0005739	0	0
Story1	Px1-09	Super Dead	LinStatic	Bottom	-8	1	0	0.0005739	0	-7
Story1	Px1-09	Live	LinStatic	Top	-13	-4	0	0.0008013	0	0
Story1	Px1-09	Live	LinStatic	Bottom	-12	1	0	0.0008013	0	-11
Story1	Px1-09	EQX	LinStatic	Top	0	-7	0	-0.02928	0	0
Story1	Px1-09	EQX	LinStatic	Bottom	6	-10	0	-0.02928	0	-44
Story1	Px1-09	EQY	LinStatic	Top	0	44	0	0.006477	0	0
Story1	Px1-09	EQY	LinStatic	Bottom	-38	58	0	0.006477	0	262
Story1	Px1-09	Dead	Combination	Top	-84	-25	0	-0.0004078	0	0
Story1	Px1-09	Dead	Combination	Bottom	-78	8	0	-0.0004078	0	-75
Story1	Px13-01	Self Weight	LinStatic	Top	-18	-1	0	-0.0002228	0	4
Story1	Px13-01	Self Weight	LinStatic	Bottom	-25	-4	0	-0.0002228	0	12
Story1	Px13-01	Super Dead	LinStatic	Top	-2	-0.1419	0	0.0001302	0	1
Story1	Px13-01	Super Dead	LinStatic	Bottom	-3	-1	0	0.0001302	0	1
Story1	Px13-01	Live	LinStatic	Top	-3	-0.2044	0	0.0001818	0	1



Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	Px13-01	Live	LinStatic	Bottom	-5	-1	0	0.0001818	0	2
Story1	Px13-01	EQX	LinStatic	Top	0	1	0	-0.006645	0	0
Story1	Px13-01	EQX	LinStatic	Bottom	4	1	0	-0.006645	0	-0.4532
Story1	Px13-01	EQY	LinStatic	Top	0	4	0	0.00147	0	0
Story1	Px13-01	EQY	LinStatic	Bottom	27	10	0	0.00147	0	-3
Story1	Px13-01	Dead	Combination	Top	-20	-1	0	-9.254E-05	0	5
Story1	Px13-01	Dead	Combination	Bottom	-29	-4	0	-9.254E-05	0	14
Story1	Px13-02	Self Weight	LinStatic	Top	-49	-0.3511	0	-0.0006234	0	-12
Story1	Px13-02	Self Weight	LinStatic	Bottom	-42	-8	0	-0.0006234	0	15
Story1	Px13-02	Super Dead	LinStatic	Top	-6	-0.2867	0	0.0003644	0	-1
Story1	Px13-02	Super Dead	LinStatic	Bottom	-5	-1	0	0.0003644	0	1
Story1	Px13-02	Live	LinStatic	Top	-8	-0.4043	0	0.0005088	0	-2
Story1	Px13-02	Live	LinStatic	Bottom	-7	-2	0	0.0005088	0	2
Story1	Px13-02	EQX	LinStatic	Top	0	8	0	-0.0186	0	0
Story1	Px13-02	EQX	LinStatic	Bottom	4	8	0	-0.0186	0	12
Story1	Px13-02	EQY	LinStatic	Top	0	53	0	0.004114	0	0
Story1	Px13-02	EQY	LinStatic	Bottom	24	54	0	0.004114	0	82
Story1	Px13-02	Dead	Combination	Top	-54	-1	0	-0.000259	0	-13
Story1	Px13-02	Dead	Combination	Bottom	-47	-9	0	-0.000259	0	16
Story1	Px13-03	Self Weight	LinStatic	Top	-48	1	0	-0.0006234	0	0
Story1	Px13-03	Self Weight	LinStatic	Bottom	-45	1	0	-0.0006234	0	7
Story1	Px13-03	Super Dead	LinStatic	Top	-6	-0.2198	0	0.0003644	0	0
Story1	Px13-03	Super Dead	LinStatic	Bottom	-5	-0.2099	0	0.0003644	0	1
Story1	Px13-03	Live	LinStatic	Top	-8	-0.303	0	0.0005088	0	0
Story1	Px13-03	Live	LinStatic	Bottom	-8	-0.2898	0	0.0005088	0	1
Story1	Px13-03	EQX	LinStatic	Top	0	11	0	-0.0186	0	0
Story1	Px13-03	EQX	LinStatic	Bottom	1	10	0	-0.0186	0	9
Story1	Px13-03	EQY	LinStatic	Top	0	77	0	0.004114	0	0
Story1	Px13-03	EQY	LinStatic	Bottom	8	72	0	0.004114	0	60
Story1	Px13-03	Dead	Combination	Top	-53	1	0	-0.000259	0	0
Story1	Px13-03	Dead	Combination	Bottom	-51	1	0	-0.000259	0	8
Story1	Px13-04	Self Weight	LinStatic	Top	-48	3	0	-0.0006234	0	0
Story1	Px13-04	Self Weight	LinStatic	Bottom	-47	3	0	-0.0006234	0	5
Story1	Px13-04	Super Dead	LinStatic	Top	-6	0.02728	0	0.0003644	0	0
Story1	Px13-04	Super Dead	LinStatic	Bottom	-6	-0.01795	0	0.0003644	0	0.3523
Story1	Px13-04	Live	LinStatic	Top	-8	0.05441	0	0.0005088	0	0
Story1	Px13-04	Live	LinStatic	Bottom	-8	-0.01173	0	0.0005088	0	1
Story1	Px13-04	EQX	LinStatic	Top	0	12	0	-0.0186	0	0
Story1	Px13-04	EQX	LinStatic	Bottom	-0.4767	11	0	-0.0186	0	8
Story1	Px13-04	EQY	LinStatic	Top	0	80	0	0.004114	0	0
Story1	Px13-04	EQY	LinStatic	Bottom	-3	75	0	0.004114	0	56
Story1	Px13-04	Dead	Combination	Top	-53	3	0	-0.000259	0	0
Story1	Px13-04	Dead	Combination	Bottom	-52	3	0	-0.000259	0	6
Story1	Px13-05	Self Weight	LinStatic	Top	-48	4	0	-0.0006234	0	0



Table 5.6 - Pier Forces (continued)

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	Px13-05	Self Weight	LinStatic	Bottom	-48	3	0	-0.0006234	0	5
Story1	Px13-05	Super Dead	LinStatic	Top	-6	0.09488	0	0.0003644	0	0
Story1	Px13-05	Super Dead	LinStatic	Bottom	-6	0.05283	0	0.0003644	0	0.2694
Story1	Px13-05	Live	LinStatic	Top	-8	0.1503	0	0.0005088	0	0
Story1	Px13-05	Live	LinStatic	Bottom	-8	0.08788	0	0.0005088	0	0.4026
Story1	Px13-05	EQX	LinStatic	Top	0	10	0	-0.0186	0	0
Story1	Px13-05	EQX	LinStatic	Bottom	-2	9	0	-0.0186	0	10
Story1	Px13-05	EQY	LinStatic	Top	0	70	0	0.004114	0	0
Story1	Px13-05	EQY	LinStatic	Bottom	-17	61	0	0.004114	0	71
Story1	Px13-05	Dead	Combination	Top	-53	4	0	-0.000259	0	0
Story1	Px13-05	Dead	Combination	Bottom	-54	3	0	-0.000259	0	5
Story1	Px13-06	Self Weight	LinStatic	Top	-48	2	0	-0.0006234	0	0
Story1	Px13-06	Self Weight	LinStatic	Bottom	-50	4	0	-0.0006234	0	7
Story1	Px13-06	Super Dead	LinStatic	Top	-6	0.06529	0	0.0003644	0	0
Story1	Px13-06	Super Dead	LinStatic	Bottom	-6	0.2497	0	0.0003644	0	0.2827
Story1	Px13-06	Live	LinStatic	Top	-8	0.09911	0	0.0005088	0	0
Story1	Px13-06	Live	LinStatic	Bottom	-8	0.3682	0	0.0005088	0	0.4293
Story1	Px13-06	EQX	LinStatic	Top	0	4	0	-0.0186	0	0
Story1	Px13-06	EQX	LinStatic	Bottom	-6	6	0	-0.0186	0	16
Story1	Px13-06	EQY	LinStatic	Top	0	25	0	0.004114	0	0
Story1	Px13-06	EQY	LinStatic	Bottom	-39	39	0	0.004114	0	110
Story1	Px13-06	Dead	Combination	Top	-53	2	0	-0.000259	0	0
Story1	Px13-06	Dead	Combination	Bottom	-55	4	0	-0.000259	0	7
Story1	Px13-07	Self Weight	LinStatic	Top	-46	-15	-9.309E-06	-0.0004271	0	-16
Story1	Px13-07	Self Weight	LinStatic	Bottom	-46	-2	8.488E-06	-0.0001642	0	-40
Story1	Px13-07	Super Dead	LinStatic	Top	-6	-2	5.442E-06	0.0002497	0	-1
Story1	Px13-07	Super Dead	LinStatic	Bottom	-5	-0.2814	0	9.599E-05	0	-5
Story1	Px13-07	Live	LinStatic	Top	-8	-3	7.598E-06	0.0003486	0	-2
Story1	Px13-07	Live	LinStatic	Bottom	-8	-0.4048	-6.928E-06	0.000134	0	-7
Story1	Px13-07	EQX	LinStatic	Top	1	2	-0.0002777	-0.01274	-1.27E-05	-14
Story1	Px13-07	EQX	LinStatic	Bottom	2	1	0.0002532	-0.004898	0	8
Story1	Px13-07	EQY	LinStatic	Top	7	15	6.142E-05	0.002818	2.81E-06	-95
Story1	Px13-07	EQY	LinStatic	Bottom	12	10	-5.601E-05	0.001084	0	56
Story1	Px13-07	Dead	Combination	Top	-52	-17	0	-0.0001774	0	-18
Story1	Px13-07	Dead	Combination	Bottom	-51	-2	0	-6.821E-05	0	-45
Story1	Px13-08	Self Weight	LinStatic	Top	-49	16	9.309E-06	-0.0006194	0	-15
Story1	Px13-08	Self Weight	LinStatic	Bottom	-50	5	-8.488E-06	-0.000352	0	27
Story1	Px13-08	Super Dead	LinStatic	Top	-6	2	-5.442E-06	0.0003621	0	-1
Story1	Px13-08	Super Dead	LinStatic	Bottom	-6	1	0	0.0002058	0	3
Story1	Px13-08	Live	LinStatic	Top	-8	3	-7.598E-06	0.0005055	0	-2
Story1	Px13-08	Live	LinStatic	Bottom	-8	1	6.928E-06	0.0002873	0	4
Story1	Px13-08	EQX	LinStatic	Top	-1	1	0.0002777	-0.01848	1.27E-05	-14
Story1	Px13-08	EQX	LinStatic	Bottom	-2	2	-0.0002532	-0.0105	0	8
Story1	Px13-08	EQY	LinStatic	Top	-7	13	-6.142E-05	0.004087	-2.81E-06	-96

**Table 5.6 - Pier Forces (continued)**

Story	Pier	Output Case	Case Type	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
Story1	Px13-08	EQY	LinStatic	Bottom	-12	11	5.601E-05	0.002322	0	54
Story1	Px13-08	Dead	Combination	Top	-55	18	0	-0.0002573	0	-17
Story1	Px13-08	Dead	Combination	Bottom	-55	6	0	-0.0001462	0	29
Story1	Px13-09	Self Weight	LinStatic	Top	-27	-3	-0.001263	-0.01418	-0.009149	9
Story1	Px13-09	Self Weight	LinStatic	Bottom	-27	5	-0.001263	-0.01418	-0.0344	-15
Story1	Px13-09	Super Dead	LinStatic	Top	-2	0.4525	-0.0004918	-0.002241	0.003722	-6
Story1	Px13-09	Super Dead	LinStatic	Bottom	-2	1	-0.0004918	-0.002241	-0.006114	4
Story1	Px13-09	Live	LinStatic	Top	-3	1	-0.0006968	-0.003215	0.005183	-8
Story1	Px13-09	Live	LinStatic	Bottom	-3	2	-0.0006968	-0.003215	-0.008752	5
Story1	Px13-09	EQX	LinStatic	Top	9	7	-0.006761	-0.0368	0.06215	-59
Story1	Px13-09	EQX	LinStatic	Bottom	9	6	-0.006761	-0.0368	-0.07306	68
Story1	Px13-09	EQY	LinStatic	Top	2	2	-0.001308	-0.003577	0.008377	-14
Story1	Px13-09	EQY	LinStatic	Bottom	2	6	-0.001308	-0.003577	-0.01778	47
Story1	Px13-09	Dead	Combination	Top	-29	-2	-0.001754	-0.01642	-0.005427	3
Story1	Px13-09	Dead	Combination	Bottom	-29	6	-0.001754	-0.01642	-0.04052	-11

**5.4 Area Results**

**Table 5.7 - Element Forces - Area Shells (Part 1 of 2)**

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	F1	1	Floor	1	94	Self Weight	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	68	Self Weight	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	138	Self Weight	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	140	Self Weight	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	94	Super Dead	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	68	Super Dead	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	138	Super Dead	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	140	Super Dead	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	94	Live	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	68	Live	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	138	Live	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	140	Live	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	94	EQX	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	68	EQX	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	138	EQX	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	140	EQX	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	94	EQY	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	68	EQY	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	138	EQY	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	140	EQY	LinStatic	0	0	0	0
Story1	F1	1	Floor	1	94	Dead	Combination	0	0	0	0
Story1	F1	1	Floor	1	68	Dead	Combination	0	0	0	0
Story1	F1	1	Floor	1	138	Dead	Combination	0	0	0	0
Story1	F1	1	Floor	1	140	Dead	Combination	0	0	0	0
Story1	W25	8	Wall	8	17	Self Weight	LinStatic	-581.85	-1859.99	157.43	-562.74

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W25	8	Wall	8	19	Self Weight	LinStatic	-589.4	-1897.76	-662.07	-312.83
Story1	W25	8	Wall	8	20	Self Weight	LinStatic	-370.81	-1854.04	-463.53	-237.86
Story1	W25	8	Wall	8	18	Self Weight	LinStatic	-363.25	-1816.27	355.97	-280.73
Story1	W25	8	Wall	8	17	Super Dead	LinStatic	-23.03	-61.64	33.21	-3.93
Story1	W25	8	Wall	8	19	Super Dead	LinStatic	-19.6	-44.48	2.41	-19.37
Story1	W25	8	Wall	8	20	Super Dead	LinStatic	-8.45	-42.25	5.12	-7.69
Story1	W25	8	Wall	8	18	Super Dead	LinStatic	-11.88	-59.41	35.92	7.43
Story1	W25	8	Wall	8	17	Live	LinStatic	-35.14	-95.5	47.39	-9.14
Story1	W25	8	Wall	8	19	Live	LinStatic	-30.36	-71.58	0.2	-30.35
Story1	W25	8	Wall	8	20	Live	LinStatic	-13.65	-68.24	4.97	-13.2
Story1	W25	8	Wall	8	18	Live	LinStatic	-18.43	-92.16	52.16	8.58
Story1	W25	8	Wall	8	17	EQX	LinStatic	36.52	505.55	1416.86	1707.17
Story1	W25	8	Wall	8	19	EQX	LinStatic	-174.65	-550.3	1401.46	1051.52
Story1	W25	8	Wall	8	20	EQX	LinStatic	-107.37	-536.84	1638.16	1330.07
Story1	W25	8	Wall	8	18	EQX	LinStatic	103.8	519	1653.56	1977.94
Story1	W25	8	Wall	8	17	EQY	LinStatic	-30.74	-84.36	40.66	-8.85
Story1	W25	8	Wall	8	19	EQY	LinStatic	-13.46	2.06	0.32	2.06
Story1	W25	8	Wall	8	20	EQY	LinStatic	0.99	4.95	0.25	4.96
Story1	W25	8	Wall	8	18	EQY	LinStatic	-16.29	-81.47	40.59	3.17
Story1	W25	8	Wall	8	17	Dead	Combination	-604.88	-1921.63	190.63	-577.84
Story1	W25	8	Wall	8	19	Dead	Combination	-609	-1942.23	-659.67	-337.78
Story1	W25	8	Wall	8	20	Dead	Combination	-379.26	-1896.28	-458.41	-251.5
Story1	W25	8	Wall	8	18	Dead	Combination	-375.14	-1875.68	391.89	-278.95
Story1	W52	12	Wall	12	25	Self Weight	LinStatic	-946.3	-2019.16	294.38	-870.84
Story1	W52	12	Wall	12	27	Self Weight	LinStatic	-923.99	-1907.6	-254.79	-861.91
Story1	W52	12	Wall	12	28	Self Weight	LinStatic	-358.92	-1794.59	-379.06	-264.98
Story1	W52	12	Wall	12	26	Self Weight	LinStatic	-381.23	-1906.15	170.12	-362.48
Story1	W52	12	Wall	12	25	Super Dead	LinStatic	-22.1	-49.38	1.02	-22.06
Story1	W52	12	Wall	12	27	Super Dead	LinStatic	-20.7	-42.36	-15.77	-12.4
Story1	W52	12	Wall	12	28	Super Dead	LinStatic	-7.96	-39.82	-15.56	-1.62
Story1	W52	12	Wall	12	26	Super Dead	LinStatic	-9.37	-46.83	1.22	-9.33
Story1	W52	12	Wall	12	25	Live	LinStatic	-35.59	-79.05	2.84	-35.4
Story1	W52	12	Wall	12	27	Live	LinStatic	-33.51	-68.66	-23.37	-21.84
Story1	W52	12	Wall	12	28	Live	LinStatic	-12.91	-64.54	-23.67	-3.7
Story1	W52	12	Wall	12	26	Live	LinStatic	-14.99	-74.93	2.53	-14.88
Story1	W52	12	Wall	12	25	EQX	LinStatic	325.36	1031.07	796.6	1549.47
Story1	W52	12	Wall	12	27	EQX	LinStatic	182.26	315.62	1587.97	1838.31
Story1	W52	12	Wall	12	28	EQX	LinStatic	58.16	290.8	1156.96	1337.27
Story1	W52	12	Wall	12	26	EQX	LinStatic	201.25	1006.25	365.6	1147.51
Story1	W52	12	Wall	12	25	EQY	LinStatic	-16.8	-53.36	-41.25	10.04
Story1	W52	12	Wall	12	27	EQY	LinStatic	-9.4	-16.36	-82.27	69.46
Story1	W52	12	Wall	12	28	EQY	LinStatic	-3.02	-15.08	-59.9	51.15
Story1	W52	12	Wall	12	26	EQY	LinStatic	-10.42	-52.09	-18.88	-3.14
Story1	W52	12	Wall	12	25	Dead	Combination	-968.4	-2068.54	295.4	-894.1
Story1	W52	12	Wall	12	27	Dead	Combination	-944.69	-1949.96	-270.56	-876.5

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W52	12	Wall	12	28	Dead	Combination	-366.88	-1834.4	-394.62	-267.5
Story1	W52	12	Wall	12	26	Dead	Combination	-390.6	-1952.98	171.34	-372.03
Story1	W56	14	Wall	14	35	Self Weight	LinStatic	-728.78	-1928.01	390.14	-613.03
Story1	W56	14	Wall	14	37	Self Weight	LinStatic	-736.32	-1965.71	-455.3	-586.06
Story1	W56	14	Wall	14	38	Self Weight	LinStatic	-378.84	-1894.22	-416.91	-271.71
Story1	W56	14	Wall	14	36	Self Weight	LinStatic	-371.3	-1856.51	428.53	-256.53
Story1	W56	14	Wall	14	35	Super Dead	LinStatic	-14.5	-42.2	-3.93	-13.95
Story1	W56	14	Wall	14	37	Super Dead	LinStatic	-13.52	-37.3	-20.99	-1.29
Story1	W56	14	Wall	14	38	Super Dead	LinStatic	-7.21	-36.04	-21.86	4.56
Story1	W56	14	Wall	14	36	Super Dead	LinStatic	-8.19	-40.94	-4.81	-7.5
Story1	W56	14	Wall	14	35	Live	LinStatic	-23.86	-68.53	-3.65	-23.57
Story1	W56	14	Wall	14	37	Live	LinStatic	-22.52	-61.83	-31.66	-4.91
Story1	W56	14	Wall	14	38	Live	LinStatic	-11.94	-59.72	-32.71	4.67
Story1	W56	14	Wall	14	36	Live	LinStatic	-13.28	-66.41	-4.69	-12.87
Story1	W56	14	Wall	14	35	EQX	LinStatic	-137.16	225.5	1863.91	1916.88
Story1	W56	14	Wall	14	37	EQX	LinStatic	-311.53	-646.38	1740.85	1269.92
Story1	W56	14	Wall	14	38	EQX	LinStatic	-121.68	-608.41	1999.3	1649.01
Story1	W56	14	Wall	14	36	EQX	LinStatic	52.69	263.47	2122.36	2283.06
Story1	W56	14	Wall	14	35	EQY	LinStatic	7.1	-11.68	-96.52	94.68
Story1	W56	14	Wall	14	37	EQY	LinStatic	16.13	33.47	-90.14	115.36
Story1	W56	14	Wall	14	38	EQY	LinStatic	6.3	31.5	-103.53	123.19
Story1	W56	14	Wall	14	36	EQY	LinStatic	-2.73	-13.64	-109.9	101.85
Story1	W56	14	Wall	14	35	Dead	Combination	-743.28	-1970.21	386.21	-631.83
Story1	W56	14	Wall	14	37	Dead	Combination	-749.84	-2003.01	-476.29	-589.37
Story1	W56	14	Wall	14	38	Dead	Combination	-386.05	-1930.26	-438.78	-270.08
Story1	W56	14	Wall	14	36	Dead	Combination	-379.49	-1897.45	423.72	-269.23
Story1	W60	15	Wall	15	115	Self Weight	LinStatic	-528.89	-2114.3	722.64	-248.94
Story1	W60	15	Wall	15	111	Self Weight	LinStatic	-444.91	-1694.42	-260.77	-392.67
Story1	W60	15	Wall	15	112	Self Weight	LinStatic	-334.47	-1672.33	-766.61	14.03
Story1	W60	15	Wall	15	116	Self Weight	LinStatic	-418.44	-2092.21	216.8	-390.82
Story1	W60	15	Wall	15	115	Super Dead	LinStatic	-9.59	-42.44	5.13	-8.81
Story1	W60	15	Wall	15	111	Super Dead	LinStatic	-6.93	-29.16	-11.36	-2.15
Story1	W60	15	Wall	15	112	Super Dead	LinStatic	-5.79	-28.93	-18.92	4.82
Story1	W60	15	Wall	15	116	Super Dead	LinStatic	-8.44	-42.21	-2.43	-8.27
Story1	W60	15	Wall	15	115	Live	LinStatic	-16.01	-69.77	10.68	-13.97
Story1	W60	15	Wall	15	111	Live	LinStatic	-11.87	-49.09	-17.21	-5.13
Story1	W60	15	Wall	15	112	Live	LinStatic	-9.73	-48.66	-30.25	6.78
Story1	W60	15	Wall	15	116	Live	LinStatic	-13.87	-69.34	-2.37	-13.77
Story1	W60	15	Wall	15	115	EQX	LinStatic	-242.4	-339.99	1551.71	1261.28
Story1	W60	15	Wall	15	111	EQX	LinStatic	-377.68	-1016.4	896.17	254.33
Story1	W60	15	Wall	15	112	EQX	LinStatic	-196.01	-980.07	417.16	-15.58
Story1	W60	15	Wall	15	116	EQX	LinStatic	-60.73	-303.66	1072.7	897.36
Story1	W60	15	Wall	15	115	EQY	LinStatic	12.55	17.6	-80.35	95.47
Story1	W60	15	Wall	15	111	EQY	LinStatic	19.56	52.63	-46.4	85.36
Story1	W60	15	Wall	15	112	EQY	LinStatic	10.15	50.75	-21.6	60.09

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W60	15	Wall	15	116	EQY	LinStatic	3.14	15.72	-55.55	65.33
Story1	W60	15	Wall	15	115	Dead	Combination	-538.48	-2156.75	727.77	-259.33
Story1	W60	15	Wall	15	111	Dead	Combination	-451.84	-1723.58	-272.13	-396.06
Story1	W60	15	Wall	15	112	Dead	Combination	-340.25	-1701.26	-785.53	18.54
Story1	W60	15	Wall	15	116	Dead	Combination	-426.89	-2134.43	214.37	-400.38
Story1	W71	5	Wall	5	139	Self Weight	LinStatic	-134.61	-1369.09	-66.55	-131.04
Story1	W71	5	Wall	5	15	Self Weight	LinStatic	-357.89	-2485.47	-351.52	-301.32
Story1	W71	5	Wall	5	16	Self Weight	LinStatic	-502.89	-2514.47	-133.58	-494.06
Story1	W71	5	Wall	5	140	Self Weight	LinStatic	-279.62	-1398.09	151.4	-259.49
Story1	W71	5	Wall	5	139	Super Dead	LinStatic	-12.77	-78.14	55.18	18.68
Story1	W71	5	Wall	5	15	Super Dead	LinStatic	-12.42	-76.38	37.64	5
Story1	W71	5	Wall	5	16	Super Dead	LinStatic	-15.4	-76.98	52.37	14.57
Story1	W71	5	Wall	5	140	Super Dead	LinStatic	-15.75	-78.74	69.91	29.43
Story1	W71	5	Wall	5	139	Live	LinStatic	-18.58	-116.32	77.18	23.9
Story1	W71	5	Wall	5	15	Live	LinStatic	-19.16	-119.21	51.18	2.38
Story1	W71	5	Wall	5	16	Live	LinStatic	-24.04	-120.19	72.91	15.22
Story1	W71	5	Wall	5	140	Live	LinStatic	-23.46	-117.3	98.91	39.1
Story1	W71	5	Wall	5	139	EQX	LinStatic	103.45	463.8	1150.56	1448.21
Story1	W71	5	Wall	5	15	EQX	LinStatic	87.33	383.2	1243.54	1487.58
Story1	W71	5	Wall	5	16	EQX	LinStatic	76.2	380.98	1101.41	1340.49
Story1	W71	5	Wall	5	140	EQX	LinStatic	92.31	461.57	1008.43	1302.13
Story1	W71	5	Wall	5	139	EQY	LinStatic	-17.7	-59.15	142.11	105.19
Story1	W71	5	Wall	5	15	EQY	LinStatic	-30.74	-124.35	106.05	38.38
Story1	W71	5	Wall	5	16	EQY	LinStatic	-24.63	-123.13	130.66	65.75
Story1	W71	5	Wall	5	140	EQY	LinStatic	-11.58	-57.92	166.71	133.56
Story1	W71	5	Wall	5	139	Dead	Combination	-147.38	-1447.23	-11.37	-147.28
Story1	W71	5	Wall	5	15	Dead	Combination	-370.31	-2561.85	-313.88	-326.24
Story1	W71	5	Wall	5	16	Dead	Combination	-518.29	-2591.45	-81.21	-515.11
Story1	W71	5	Wall	5	140	Dead	Combination	-295.37	-1476.83	221.31	-255.27
Story1	W72	13	Wall	13	159	Self Weight	LinStatic	-714.61	-1939.07	409.9	-590.06
Story1	W72	13	Wall	13	33	Self Weight	LinStatic	-712.88	-1930.41	-434.98	-573.44
Story1	W72	13	Wall	13	34	Self Weight	LinStatic	-372.46	-1862.32	-427.7	-258.42
Story1	W72	13	Wall	13	160	Self Weight	LinStatic	-374.2	-1870.99	417.19	-265.77
Story1	W72	13	Wall	13	159	Super Dead	LinStatic	-16.69	-45.1	-2.45	-16.48
Story1	W72	13	Wall	13	33	Super Dead	LinStatic	-15.53	-39.29	-21.71	-2.66
Story1	W72	13	Wall	13	34	Super Dead	LinStatic	-7.54	-37.69	-23.18	5.04
Story1	W72	13	Wall	13	160	Super Dead	LinStatic	-8.7	-43.5	-3.93	-8.26
Story1	W72	13	Wall	13	159	Live	LinStatic	-26.87	-72.65	-1.47	-26.82
Story1	W72	13	Wall	13	33	Live	LinStatic	-25.23	-64.45	-32.58	-6.82
Story1	W72	13	Wall	13	34	Live	LinStatic	-12.38	-61.88	-34.62	5.43
Story1	W72	13	Wall	13	160	Live	LinStatic	-14.02	-70.08	-3.51	-13.8
Story1	W72	13	Wall	13	159	EQX	LinStatic	243.49	633.24	1701.12	2150.61
Story1	W72	13	Wall	13	33	EQX	LinStatic	71.28	-227.79	1916.92	1844.48
Story1	W72	13	Wall	13	34	EQX	LinStatic	-50.43	-252.14	2166.5	2017.57
Story1	W72	13	Wall	13	160	EQX	LinStatic	121.78	608.9	1950.71	2331.19

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W72	13	Wall	13	159	EQY	LinStatic	-12.61	-32.79	-88.08	65.96
Story1	W72	13	Wall	13	33	EQY	LinStatic	-3.69	11.8	-99.26	103.61
Story1	W72	13	Wall	13	34	EQY	LinStatic	2.61	13.06	-112.18	120.14
Story1	W72	13	Wall	13	160	EQY	LinStatic	-6.31	-31.53	-101.01	82.87
Story1	W72	13	Wall	13	159	Dead	Combination	-731.3	-1984.17	407.45	-610.44
Story1	W72	13	Wall	13	33	Dead	Combination	-728.4	-1969.7	-456.69	-578.49
Story1	W72	13	Wall	13	34	Dead	Combination	-380	-1900.02	-450.88	-256.32
Story1	W72	13	Wall	13	160	Dead	Combination	-382.9	-1914.49	413.26	-278.51
Story1	W10	43	Wall	43	41	Self Weight	LinStatic	-677.13	-1968.01	383.2	-571.95
Story1	W10	43	Wall	43	1	Self Weight	LinStatic	-679.63	-1980.53	-572.61	-463.5
Story1	W10	43	Wall	43	2	Self Weight	LinStatic	-384.29	-1921.46	-486.85	-243.07
Story1	W10	43	Wall	43	42	Self Weight	LinStatic	-381.79	-1908.94	468.96	-249.28
Story1	W10	43	Wall	43	41	Super Dead	LinStatic	-78.27	-227.6	50.34	-62.89
Story1	W10	43	Wall	43	1	Super Dead	LinStatic	-79.06	-231.56	-58.71	-59.08
Story1	W10	43	Wall	43	2	Super Dead	LinStatic	-44.95	-224.73	-51.96	-31.01
Story1	W10	43	Wall	43	42	Super Dead	LinStatic	-44.16	-220.78	57.1	-27.3
Story1	W10	43	Wall	43	41	Live	LinStatic	-113.18	-329.11	72.54	-91.08
Story1	W10	43	Wall	43	1	Live	LinStatic	-114.31	-334.72	-85.21	-85.2
Story1	W10	43	Wall	43	2	Live	LinStatic	-64.97	-324.85	-75.31	-44.73
Story1	W10	43	Wall	43	42	Live	LinStatic	-63.85	-319.24	82.45	-39.55
Story1	W10	43	Wall	43	41	EQX	LinStatic	-54.48	-155.72	-158.91	61.67
Story1	W10	43	Wall	43	1	EQX	LinStatic	-39.12	-78.92	-281.44	223.12
Story1	W10	43	Wall	43	2	EQX	LinStatic	-14.81	-74.06	-174.64	132.7
Story1	W10	43	Wall	43	42	EQX	LinStatic	-30.17	-150.86	-52.1	-10.79
Story1	W10	43	Wall	43	41	EQY	LinStatic	-375.64	-1072.83	-1093.97	423.93
Story1	W10	43	Wall	43	1	EQY	LinStatic	-269.7	-543.17	-1937.66	1536.04
Story1	W10	43	Wall	43	2	EQY	LinStatic	-101.92	-509.61	-1203.09	914.47
Story1	W10	43	Wall	43	42	EQY	LinStatic	-207.85	-1039.27	-359.39	-74.04
Story1	W10	43	Wall	43	41	Dead	Combination	-755.4	-2195.61	433.54	-634.97
Story1	W10	43	Wall	43	1	Dead	Combination	-758.7	-2212.09	-631.32	-522.76
Story1	W10	43	Wall	43	2	Dead	Combination	-429.24	-2146.2	-538.81	-274.16
Story1	W10	43	Wall	43	42	Dead	Combination	-425.94	-2129.72	526.06	-276.61
Story1	W13	44	Wall	44	49	Self Weight	LinStatic	-738.31	-1971.98	315.77	-662.18
Story1	W13	44	Wall	44	53	Self Weight	LinStatic	-729.84	-1929.66	-531.84	-528.03
Story1	W13	44	Wall	44	54	Self Weight	LinStatic	-371.6	-1858.01	-553.36	-188.22
Story1	W13	44	Wall	44	50	Self Weight	LinStatic	-380.07	-1900.33	294.26	-325.1
Story1	W13	44	Wall	44	49	Super Dead	LinStatic	-85.11	-229.37	47.39	-70.94
Story1	W13	44	Wall	44	53	Super Dead	LinStatic	-84.89	-228.28	-51.66	-68.22
Story1	W13	44	Wall	44	54	Super Dead	LinStatic	-44.02	-220.11	-53.03	-29.28
Story1	W13	44	Wall	44	50	Super Dead	LinStatic	-44.24	-221.2	46.01	-32.99
Story1	W13	44	Wall	44	49	Live	LinStatic	-123.08	-331.61	68.07	-102.83
Story1	W13	44	Wall	44	53	Live	LinStatic	-122.73	-329.88	-75.1	-98.37
Story1	W13	44	Wall	44	54	Live	LinStatic	-63.61	-318.05	-77.14	-42.05
Story1	W13	44	Wall	44	50	Live	LinStatic	-63.96	-319.78	66.03	-47.92
Story1	W13	44	Wall	44	49	EQX	LinStatic	-67.27	-115.55	-315.69	225.2



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W13	44	Wall	44	53	EQX	LinStatic	-42.7	7.3	-351.15	334.34
Story1	W13	44	Wall	44	54	EQX	LinStatic	3.3	16.49	-387.83	397.78
Story1	W13	44	Wall	44	50	EQX	LinStatic	-21.27	-106.35	-352.36	291.11
Story1	W13	44	Wall	44	49	EQY	LinStatic	-463.2	-795.68	-2174.11	1551.01
Story1	W13	44	Wall	44	53	EQY	LinStatic	-294.03	50.2	-2418.33	2302.54
Story1	W13	44	Wall	44	54	EQY	LinStatic	22.71	113.55	-2670.83	2739.35
Story1	W13	44	Wall	44	50	EQY	LinStatic	-146.47	-732.33	-2426.6	2004.82
Story1	W13	44	Wall	44	49	Dead	Combination	-823.42	-2201.35	363.16	-733.56
Story1	W13	44	Wall	44	53	Dead	Combination	-814.73	-2157.94	-583.5	-596.66
Story1	W13	44	Wall	44	54	Dead	Combination	-415.62	-2078.11	-606.39	-217.95
Story1	W13	44	Wall	44	50	Dead	Combination	-424.3	-2121.52	340.27	-358.63
Story1	W16	45	Wall	45	61	Self Weight	LinStatic	-710.31	-1939.11	305.07	-638.74
Story1	W16	45	Wall	45	99	Self Weight	LinStatic	-703.52	-1905.19	-520.24	-509.59
Story1	W16	45	Wall	45	100	Self Weight	LinStatic	-367.6	-1838.01	-535.72	-193.12
Story1	W16	45	Wall	45	62	Self Weight	LinStatic	-374.38	-1871.92	289.6	-320.33
Story1	W16	45	Wall	45	61	Super Dead	LinStatic	-83.18	-227.59	49.21	-68
Story1	W16	45	Wall	45	99	Super Dead	LinStatic	-82.87	-226.05	-48.4	-68.04
Story1	W16	45	Wall	45	100	Super Dead	LinStatic	-43.64	-218.2	-49.79	-30.43
Story1	W16	45	Wall	45	62	Super Dead	LinStatic	-43.95	-219.75	47.81	-31.79
Story1	W16	45	Wall	45	61	Live	LinStatic	-120.23	-328.96	70.58	-98.61
Story1	W16	45	Wall	45	99	Live	LinStatic	-119.76	-326.62	-70.47	-98.04
Story1	W16	45	Wall	45	100	Live	LinStatic	-63.06	-315.28	-72.51	-43.7
Story1	W16	45	Wall	45	62	Live	LinStatic	-63.52	-317.61	68.54	-46.21
Story1	W16	45	Wall	45	61	EQX	LinStatic	-24.09	-49.37	-412.57	376.03
Story1	W16	45	Wall	45	99	EQX	LinStatic	-8.65	27.86	-410.4	420.41
Story1	W16	45	Wall	45	100	EQX	LinStatic	6.16	30.82	-423.94	442.61
Story1	W16	45	Wall	45	62	EQX	LinStatic	-9.28	-46.4	-426.1	398.66
Story1	W16	45	Wall	45	61	EQY	LinStatic	-165.93	-339.98	-2841.25	2589.63
Story1	W16	45	Wall	45	99	EQY	LinStatic	-59.56	191.86	-2826.34	2895.28
Story1	W16	45	Wall	45	100	EQY	LinStatic	42.45	212.26	-2919.53	3048.12
Story1	W16	45	Wall	45	62	EQY	LinStatic	-63.91	-319.57	-2934.45	2745.48
Story1	W16	45	Wall	45	61	Dead	Combination	-793.48	-2166.7	354.28	-707.47
Story1	W16	45	Wall	45	99	Dead	Combination	-786.39	-2131.24	-568.64	-578.19
Story1	W16	45	Wall	45	100	Dead	Combination	-411.24	-2056.21	-585.51	-224.12
Story1	W16	45	Wall	45	62	Dead	Combination	-418.33	-2091.67	337.41	-352.86
Story1	W20	46	Wall	46	103	Self Weight	LinStatic	-687.04	-1907.1	350.4	-593.57
Story1	W20	46	Wall	46	147	Self Weight	LinStatic	-679.42	-1869.01	-448.92	-529.02
Story1	W20	46	Wall	46	148	Self Weight	LinStatic	-361.07	-1805.34	-443.2	-235.91
Story1	W20	46	Wall	46	106	Self Weight	LinStatic	-368.69	-1843.43	356.12	-287.19
Story1	W20	46	Wall	46	103	Super Dead	LinStatic	-81.43	-224.75	54.38	-63.13
Story1	W20	46	Wall	46	147	Super Dead	LinStatic	-81.1	-223.11	-41.1	-70.07
Story1	W20	46	Wall	46	148	Super Dead	LinStatic	-43.1	-215.51	-39.72	-34.39
Story1	W20	46	Wall	46	106	Super Dead	LinStatic	-43.43	-217.15	55.76	-27.07
Story1	W20	46	Wall	46	103	Live	LinStatic	-117.66	-324.8	78.06	-91.54
Story1	W20	46	Wall	46	147	Live	LinStatic	-117.17	-322.32	-59.87	-100.97

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W20	46	Wall	46	148	Live	LinStatic	-62.27	-311.34	-57.92	-49.46
Story1	W20	46	Wall	46	106	Live	LinStatic	-62.76	-313.82	80.02	-39.43
Story1	W20	46	Wall	46	103	EQX	LinStatic	7.3	-20.06	-406.88	400.73
Story1	W20	46	Wall	46	147	EQX	LinStatic	25.26	69.74	-375.07	423.23
Story1	W20	46	Wall	46	148	EQX	LinStatic	13.48	67.39	-396.91	438.26
Story1	W20	46	Wall	46	106	EQX	LinStatic	-4.48	-22.42	-428.72	415.37
Story1	W20	46	Wall	46	103	EQY	LinStatic	50.27	-138.16	-2802.06	2759.69
Story1	W20	46	Wall	46	147	EQY	LinStatic	173.96	480.29	-2582.99	2914.65
Story1	W20	46	Wall	46	148	EQY	LinStatic	92.81	464.06	-2733.44	3018.17
Story1	W20	46	Wall	46	106	EQY	LinStatic	-30.88	-154.39	-2952.5	2860.51
Story1	W20	46	Wall	46	103	Dead	Combination	-768.47	-2131.85	404.79	-657.34
Story1	W20	46	Wall	46	147	Dead	Combination	-760.52	-2092.12	-490.02	-599.64
Story1	W20	46	Wall	46	148	Dead	Combination	-404.17	-2020.85	-482.93	-270.9
Story1	W20	46	Wall	46	106	Dead	Combination	-412.12	-2060.58	411.88	-314.93
Story1	W42	47	Wall	47	155	Self Weight	LinStatic	-530.41	-1867.86	676.3	-248.04
Story1	W42	47	Wall	47	179	Self Weight	LinStatic	-527.36	-1852.63	-101.91	-519.57
Story1	W42	47	Wall	47	180	Self Weight	LinStatic	-363.99	-1819.95	-407.82	-257.54
Story1	W42	47	Wall	47	156	Self Weight	LinStatic	-367.04	-1835.18	370.4	-278.88
Story1	W42	47	Wall	47	155	Super Dead	LinStatic	-63.72	-221.21	90.81	-22.27
Story1	W42	47	Wall	47	179	Super Dead	LinStatic	-64.2	-223.62	-3.37	-64.13
Story1	W42	47	Wall	47	180	Super Dead	LinStatic	-43.91	-219.56	-40.21	-35.14
Story1	W42	47	Wall	47	156	Super Dead	LinStatic	-43.43	-217.15	53.97	-28.03
Story1	W42	47	Wall	47	155	Live	LinStatic	-92.04	-319.65	130.79	-32.48
Story1	W42	47	Wall	47	179	Live	LinStatic	-92.7	-322.96	-5.23	-92.58
Story1	W42	47	Wall	47	180	Live	LinStatic	-63.42	-317.1	-58.43	-50.61
Story1	W42	47	Wall	47	156	Live	LinStatic	-62.76	-313.8	77.58	-40.72
Story1	W42	47	Wall	47	155	EQX	LinStatic	32.53	14.61	-341.33	365.02
Story1	W42	47	Wall	47	179	EQX	LinStatic	58.91	146.53	-271.9	378.13
Story1	W42	47	Wall	47	180	EQX	LinStatic	28.07	140.36	-250.42	340.85
Story1	W42	47	Wall	47	156	EQX	LinStatic	1.69	8.44	-319.85	324.93
Story1	W42	47	Wall	47	155	EQY	LinStatic	224.02	100.58	-2350.66	2513.77
Story1	W42	47	Wall	47	179	EQY	LinStatic	405.72	1009.09	-1872.5	2604.05
Story1	W42	47	Wall	47	180	EQY	LinStatic	193.32	966.61	-1724.58	2347.36
Story1	W42	47	Wall	47	156	EQY	LinStatic	11.62	58.1	-2202.75	2237.73
Story1	W42	47	Wall	47	155	Dead	Combination	-594.13	-2089.07	767.11	-270.54
Story1	W42	47	Wall	47	179	Dead	Combination	-591.57	-2076.25	-105.29	-584.14
Story1	W42	47	Wall	47	180	Dead	Combination	-407.9	-2039.51	-448.03	-292.97
Story1	W42	47	Wall	47	156	Dead	Combination	-410.47	-2052.34	424.37	-307.27
Story1	W76	9	Wall	9	21	Self Weight	LinStatic	-899.47	-1877.77	190.22	-863.79
Story1	W76	9	Wall	9	290	Self Weight	LinStatic	-919.07	-1975.76	-323.37	-827.97
Story1	W76	9	Wall	9	291	Self Weight	LinStatic	-373.32	-1866.61	-194.72	-348.35
Story1	W76	9	Wall	9	22	Self Weight	LinStatic	-353.72	-1768.62	318.87	-285.18
Story1	W76	9	Wall	9	21	Super Dead	LinStatic	-25.31	-50	9.9	-21.83
Story1	W76	9	Wall	9	290	Super Dead	LinStatic	-23.39	-40.44	-3.78	-22.59
Story1	W76	9	Wall	9	291	Super Dead	LinStatic	-7.45	-37.25	-3.45	-7.06



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W76	9	Wall	9	22	Super Dead	LinStatic	-9.36	-46.82	10.23	-6.75
Story1	W76	9	Wall	9	21	Live	LinStatic	-39.86	-79.25	14.81	-34.91
Story1	W76	9	Wall	9	290	Live	LinStatic	-37.27	-66.28	-6.86	-35.73
Story1	W76	9	Wall	9	291	Live	LinStatic	-12.26	-61.28	-5.78	-11.58
Story1	W76	9	Wall	9	22	Live	LinStatic	-14.85	-74.25	15.89	-10.86
Story1	W76	9	Wall	9	21	EQX	LinStatic	-119.43	-166.46	1362.56	1219.82
Story1	W76	9	Wall	9	290	EQX	LinStatic	-281.38	-976.18	704.73	156.92
Story1	W76	9	Wall	9	291	EQX	LinStatic	-191.65	-958.24	353.35	-53.62
Story1	W76	9	Wall	9	22	EQX	LinStatic	-29.7	-148.51	1011.18	923.82
Story1	W76	9	Wall	9	21	EQY	LinStatic	-16.11	-27.37	-24.27	3.18
Story1	W76	9	Wall	9	290	EQY	LinStatic	-3.56	35.4	-12.31	38.96
Story1	W76	9	Wall	9	291	EQY	LinStatic	7.52	37.61	-9.68	40.45
Story1	W76	9	Wall	9	22	EQY	LinStatic	-5.03	-25.15	-21.64	8.77
Story1	W76	9	Wall	9	21	Dead	Combination	-924.78	-1927.77	200.11	-886.33
Story1	W76	9	Wall	9	290	Dead	Combination	-942.47	-2016.2	-327.15	-850.64
Story1	W76	9	Wall	9	291	Dead	Combination	-380.77	-1903.86	-198.16	-355.41
Story1	W76	9	Wall	9	22	Dead	Combination	-363.09	-1815.43	329.1	-291.99
Story1	W78	49	Wall	49	181	Self Weight	LinStatic	-206.27	-2999.85	236.18	-186.45
Story1	W78	49	Wall	49	314	Self Weight	LinStatic	90.3	-1516.96	12.19	90.4
Story1	W78	49	Wall	49	315	Self Weight	LinStatic	-319.8	-1598.98	-66.82	-316.32
Story1	W78	49	Wall	49	182	Self Weight	LinStatic	-616.37	-3081.87	157.17	-606.39
Story1	W78	49	Wall	49	181	Super Dead	LinStatic	-25.64	-364.16	31.42	-22.74
Story1	W78	49	Wall	49	314	Super Dead	LinStatic	10.73	-182.35	3.97	10.81
Story1	W78	49	Wall	49	315	Super Dead	LinStatic	-38.44	-192.19	-6.13	-38.19
Story1	W78	49	Wall	49	182	Super Dead	LinStatic	-74.8	-373.99	21.32	-73.29
Story1	W78	49	Wall	49	181	Live	LinStatic	-37	-525.85	45.26	-32.84
Story1	W78	49	Wall	49	314	Live	LinStatic	15.5	-263.39	5.64	15.61
Story1	W78	49	Wall	49	315	Live	LinStatic	-55.52	-277.6	-8.92	-55.16
Story1	W78	49	Wall	49	182	Live	LinStatic	-108.01	-540.06	30.7	-105.84
Story1	W78	49	Wall	49	181	EQX	LinStatic	39.46	302.17	-110.05	342.17
Story1	W78	49	Wall	49	314	EQX	LinStatic	-1.67	96.49	-79.48	140.82
Story1	W78	49	Wall	49	315	EQX	LinStatic	20.17	100.86	-55.56	129.18
Story1	W78	49	Wall	49	182	EQX	LinStatic	61.31	306.53	-86.13	333.76
Story1	W78	49	Wall	49	181	EQY	LinStatic	271.78	2080.93	-757.85	2356.44
Story1	W78	49	Wall	49	314	EQY	LinStatic	-11.5	664.53	-547.35	969.82
Story1	W78	49	Wall	49	315	EQY	LinStatic	138.92	694.61	-382.63	889.63
Story1	W78	49	Wall	49	182	EQY	LinStatic	422.2	2111.02	-593.13	2298.52
Story1	W78	49	Wall	49	181	Dead	Combination	-231.91	-3364.01	267.6	-209.21
Story1	W78	49	Wall	49	314	Dead	Combination	101.03	-1699.31	16.16	101.17
Story1	W78	49	Wall	49	315	Dead	Combination	-358.23	-1791.17	-72.95	-354.53
Story1	W78	49	Wall	49	182	Dead	Combination	-691.17	-3455.86	178.49	-679.7
Story1	W7	25	Wall	25	14	Self Weight	LinStatic	-522.8	-2171.01	649.65	-297.53
Story1	W7	25	Wall	25	31	Self Weight	LinStatic	-416.16	-1637.81	-289.22	-351.15
Story1	W7	25	Wall	25	32	Self Weight	LinStatic	-323.87	-1619.35	-724.59	0.3
Story1	W7	25	Wall	25	39	Self Weight	LinStatic	-430.51	-2152.55	214.28	-404.25

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W7	25	Wall	25	14	Super Dead	LinStatic	-61.07	-255.29	71.81	-37.41
Story1	W7	25	Wall	25	31	Super Dead	LinStatic	-48.08	-190.31	-36.99	-39.03
Story1	W7	25	Wall	25	32	Super Dead	LinStatic	-37.64	-188.22	-86.96	2.09
Story1	W7	25	Wall	25	39	Super Dead	LinStatic	-50.64	-253.2	21.84	-48.31
Story1	W7	25	Wall	25	14	Live	LinStatic	-88.29	-368.97	103.97	-53.97
Story1	W7	25	Wall	25	31	Live	LinStatic	-69.52	-275.14	-53.34	-56.51
Story1	W7	25	Wall	25	32	Live	LinStatic	-54.42	-272.12	-125.61	2.93
Story1	W7	25	Wall	25	39	Live	LinStatic	-73.19	-365.95	31.71	-69.8
Story1	W7	25	Wall	25	14	EQX	LinStatic	-44.17	-80.82	299.38	237.45
Story1	W7	25	Wall	25	31	EQX	LinStatic	-66.64	-193.19	169.16	50.69
Story1	W7	25	Wall	25	32	EQX	LinStatic	-37.47	-187.36	78.51	-3.88
Story1	W7	25	Wall	25	39	EQX	LinStatic	-15	-74.99	208.73	165.89
Story1	W7	25	Wall	25	14	EQY	LinStatic	261.75	478.99	-1774.27	2147.96
Story1	W7	25	Wall	25	31	EQY	LinStatic	394.94	1144.96	-1002.51	1840.3
Story1	W7	25	Wall	25	32	EQY	LinStatic	222.08	1110.39	-465.3	1309.48
Story1	W7	25	Wall	25	39	EQY	LinStatic	88.88	444.41	-1237.06	1516.41
Story1	W7	25	Wall	25	14	Dead	Combination	-583.88	-2426.3	721.46	-334.99
Story1	W7	25	Wall	25	31	Dead	Combination	-464.24	-1828.11	-326.21	-390.23
Story1	W7	25	Wall	25	32	Dead	Combination	-361.51	-1807.57	-811.55	2.37
Story1	W7	25	Wall	25	39	Dead	Combination	-481.15	-2405.75	236.12	-452.61
Story1	W9	24	Wall	24	24	Self Weight	LinStatic	-737.02	-1941.16	359.57	-637.83
Story1	W9	24	Wall	24	40	Self Weight	LinStatic	-729.94	-1905.74	-510.23	-539.41
Story1	W9	24	Wall	24	43	Self Weight	LinStatic	-366.62	-1833.08	-456.8	-235.96
Story1	W9	24	Wall	24	44	Self Weight	LinStatic	-373.7	-1868.49	413	-267.18
Story1	W9	24	Wall	24	24	Super Dead	LinStatic	-86.88	-230.06	36.25	-78.23
Story1	W9	24	Wall	24	40	Super Dead	LinStatic	-85.53	-223.29	-65.86	-59.1
Story1	W9	24	Wall	24	43	Super Dead	LinStatic	-42.95	-214.77	-60.31	-23.9
Story1	W9	24	Wall	24	44	Super Dead	LinStatic	-44.31	-221.55	41.8	-34.95
Story1	W9	24	Wall	24	24	Live	LinStatic	-125.56	-332.43	52.64	-112.93
Story1	W9	24	Wall	24	40	Live	LinStatic	-123.62	-322.75	-94.95	-85.61
Story1	W9	24	Wall	24	43	Live	LinStatic	-62.09	-310.45	-86.89	-34.71
Story1	W9	24	Wall	24	44	Live	LinStatic	-64.02	-320.12	60.7	-50.37
Story1	W9	24	Wall	24	24	EQX	LinStatic	-12.44	43.85	375.17	391.93
Story1	W9	24	Wall	24	40	EQX	LinStatic	-45.82	-123.04	332.89	250.69
Story1	W9	24	Wall	24	43	EQX	LinStatic	-23.72	-118.62	387.07	318.8
Story1	W9	24	Wall	24	44	EQX	LinStatic	9.65	48.27	429.35	458.75
Story1	W9	24	Wall	24	24	EQY	LinStatic	73.72	-259.9	-2223.42	2136.58
Story1	W9	24	Wall	24	40	EQY	LinStatic	271.54	729.19	-1972.86	2486.45
Story1	W9	24	Wall	24	43	EQY	LinStatic	140.6	703	-2293.99	2732.96
Story1	W9	24	Wall	24	44	EQY	LinStatic	-57.22	-286.09	-2544.55	2375.47
Story1	W9	24	Wall	24	24	Dead	Combination	-823.91	-2171.22	395.82	-716.23
Story1	W9	24	Wall	24	40	Dead	Combination	-815.47	-2129.03	-576.1	-598.61
Story1	W9	24	Wall	24	43	Dead	Combination	-409.57	-2047.85	-517.11	-260
Story1	W9	24	Wall	24	44	Dead	Combination	-418.01	-2090.04	454.8	-302.31
Story1	W12	23	Wall	23	45	Self Weight	LinStatic	-813.94	-2082.21	506.91	-636.23

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W12	23	Wall	23	47	Self Weight	LinStatic	-780.69	-1915.98	-381.82	-664.22
Story1	W12	23	Wall	23	48	Self Weight	LinStatic	-366.63	-1833.17	-507.47	-208.16
Story1	W12	23	Wall	23	46	Self Weight	LinStatic	-399.88	-1999.4	381.27	-313.65
Story1	W12	23	Wall	23	45	Super Dead	LinStatic	-98.29	-250.15	56.26	-79.72
Story1	W12	23	Wall	23	47	Super Dead	LinStatic	-93.17	-224.55	-49.73	-76.47
Story1	W12	23	Wall	23	48	Super Dead	LinStatic	-42.9	-214.49	-68.16	-19.12
Story1	W12	23	Wall	23	46	Super Dead	LinStatic	-48.02	-240.09	37.83	-40.83
Story1	W12	23	Wall	23	45	Live	LinStatic	-141.99	-361.39	81.53	-115.01
Story1	W12	23	Wall	23	47	Live	LinStatic	-134.62	-324.52	-71.62	-110.64
Story1	W12	23	Wall	23	48	Live	LinStatic	-62	-310	-98.2	-27.82
Story1	W12	23	Wall	23	46	Live	LinStatic	-69.37	-346.87	54.95	-58.89
Story1	W12	23	Wall	23	45	EQX	LinStatic	64.19	129.9	336.89	435.53
Story1	W12	23	Wall	23	47	EQX	LinStatic	28.67	-47.69	362.29	354.79
Story1	W12	23	Wall	23	48	EQX	LinStatic	-11.13	-55.65	422.68	389.88
Story1	W12	23	Wall	23	46	EQX	LinStatic	24.39	121.94	397.28	473.42
Story1	W12	23	Wall	23	45	EQY	LinStatic	-380.4	-769.84	-1996.59	1430.95
Story1	W12	23	Wall	23	47	EQY	LinStatic	-169.91	282.61	-2147.13	2215.37
Story1	W12	23	Wall	23	48	EQY	LinStatic	65.96	329.79	-2505	2706.34
Story1	W12	23	Wall	23	46	EQY	LinStatic	-144.53	-722.66	-2354.46	1938.54
Story1	W12	23	Wall	23	45	Dead	Combination	-912.22	-2332.36	563.17	-716
Story1	W12	23	Wall	23	47	Dead	Combination	-873.86	-2140.53	-431.55	-740.8
Story1	W12	23	Wall	23	48	Dead	Combination	-409.53	-2047.66	-575.62	-227.49
Story1	W12	23	Wall	23	46	Dead	Combination	-447.9	-2239.49	419.11	-354.7
Story1	W17	22	Wall	22	59	Self Weight	LinStatic	-445.04	-1570.02	231.64	-399.21
Story1	W17	22	Wall	22	51	Self Weight	LinStatic	-572.74	-2208.52	-808.56	-240.53
Story1	W17	22	Wall	22	52	Self Weight	LinStatic	-436.24	-2181.22	-95.69	-431.01
Story1	W17	22	Wall	22	60	Self Weight	LinStatic	-308.54	-1542.72	944.52	202.6
Story1	W17	22	Wall	22	59	Super Dead	LinStatic	-48.27	-179.8	5.07	-48.08
Story1	W17	22	Wall	22	51	Super Dead	LinStatic	-66.18	-269.32	-110.8	-17.44
Story1	W17	22	Wall	22	52	Super Dead	LinStatic	-53.35	-266.75	2.31	-53.33
Story1	W17	22	Wall	22	60	Super Dead	LinStatic	-35.45	-177.24	118.17	31.47
Story1	W17	22	Wall	22	59	Live	LinStatic	-69.72	-259.72	7.47	-69.43
Story1	W17	22	Wall	22	51	Live	LinStatic	-95.61	-389.14	-159.89	-25.33
Story1	W17	22	Wall	22	52	Live	LinStatic	-77.09	-385.43	3.45	-77.05
Story1	W17	22	Wall	22	60	Live	LinStatic	-51.2	-256.02	170.81	45.55
Story1	W17	22	Wall	22	59	EQX	LinStatic	51.68	158.78	222.39	333.98
Story1	W17	22	Wall	22	51	EQX	LinStatic	35.6	78.37	333.07	390.74
Story1	W17	22	Wall	22	52	EQX	LinStatic	14.84	74.22	174.52	221.56
Story1	W17	22	Wall	22	60	EQX	LinStatic	30.93	154.63	63.84	181.67
Story1	W17	22	Wall	22	59	EQY	LinStatic	-306.27	-941	-1317.99	732.03
Story1	W17	22	Wall	22	51	EQY	LinStatic	-210.96	-464.46	-1973.93	1640.29
Story1	W17	22	Wall	22	52	EQY	LinStatic	-87.97	-439.87	-1034.31	785.25
Story1	W17	22	Wall	22	60	EQY	LinStatic	-183.28	-916.4	-378.37	-23.03
Story1	W17	22	Wall	22	59	Dead	Combination	-493.31	-1749.82	236.71	-450.2
Story1	W17	22	Wall	22	51	Dead	Combination	-638.91	-2477.84	-919.36	-258.13

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W17	22	Wall	22	52	Dead	Combination	-489.59	-2447.97	-93.38	-485.15
Story1	W17	22	Wall	22	60	Dead	Combination	-343.99	-1719.96	1062.69	233.97
Story1	W19	19	Wall	19	65	Self Weight	LinStatic	-572.75	-2192.47	710.31	-305.38
Story1	W19	19	Wall	19	63	Self Weight	LinStatic	-443.21	-1544.75	-322.99	-355.49
Story1	W19	19	Wall	19	64	Self Weight	LinStatic	-303.36	-1516.78	-937.94	207
Story1	W19	19	Wall	19	66	Self Weight	LinStatic	-432.9	-2164.5	95.36	-427.66
Story1	W19	19	Wall	19	65	Super Dead	LinStatic	-65.16	-264.96	88.24	-31.77
Story1	W19	19	Wall	19	63	Super Dead	LinStatic	-46.5	-171.66	-23.16	-42.35
Story1	W19	19	Wall	19	64	Super Dead	LinStatic	-33.82	-169.12	-119.39	35.75
Story1	W19	19	Wall	19	66	Super Dead	LinStatic	-52.48	-262.42	-7.98	-52.18
Story1	W19	19	Wall	19	65	Live	LinStatic	-94.18	-382.93	127.73	-45.79
Story1	W19	19	Wall	19	63	Live	LinStatic	-67.23	-248.16	-33.33	-61.28
Story1	W19	19	Wall	19	64	Live	LinStatic	-48.9	-244.49	-172.49	51.59
Story1	W19	19	Wall	19	66	Live	LinStatic	-75.85	-379.26	-11.42	-75.42
Story1	W19	19	Wall	19	65	EQX	LinStatic	-23.82	-63.42	316.07	273.07
Story1	W19	19	Wall	19	63	EQX	LinStatic	-41.07	-149.67	211.48	122.97
Story1	W19	19	Wall	19	64	EQX	LinStatic	-29.47	-147.35	54.42	-8.19
Story1	W19	19	Wall	19	66	EQX	LinStatic	-12.22	-61.1	159.01	124.21
Story1	W19	19	Wall	19	65	EQY	LinStatic	141.18	375.83	-1873.18	2135.36
Story1	W19	19	Wall	19	63	EQY	LinStatic	243.42	887.04	-1253.36	1859.24
Story1	W19	19	Wall	19	64	EQY	LinStatic	174.66	873.28	-322.51	999.4
Story1	W19	19	Wall	19	66	EQY	LinStatic	72.42	362.08	-942.34	1170.66
Story1	W19	19	Wall	19	65	Dead	Combination	-637.91	-2457.43	798.56	-337.15
Story1	W19	19	Wall	19	63	Dead	Combination	-489.71	-1716.41	-346.16	-398.77
Story1	W19	19	Wall	19	64	Dead	Combination	-337.18	-1685.9	-1057.33	242.54
Story1	W19	19	Wall	19	66	Dead	Combination	-485.38	-2426.92	87.38	-481.46
Story1	W22	18	Wall	18	79	Self Weight	LinStatic	-1124.19	-2330.24	880.13	-660.32
Story1	W22	18	Wall	18	77	Self Weight	LinStatic	-1033.99	-1879.23	-92.67	-1023.95
Story1	W22	18	Wall	18	78	Self Weight	LinStatic	-348.42	-1742.12	-757.55	-15.96
Story1	W22	18	Wall	18	80	Self Weight	LinStatic	-438.63	-2193.13	215.25	-412.6
Story1	W22	18	Wall	18	79	Super Dead	LinStatic	-133.88	-276.26	98.24	-83.75
Story1	W22	18	Wall	18	77	Super Dead	LinStatic	-122.96	-221.64	-16.97	-120.12
Story1	W22	18	Wall	18	78	Super Dead	LinStatic	-41.05	-205.26	-95.55	2.82
Story1	W22	18	Wall	18	80	Super Dead	LinStatic	-51.97	-259.87	19.66	-50.13
Story1	W22	18	Wall	18	79	Live	LinStatic	-193.44	-399.13	142.14	-120.85
Story1	W22	18	Wall	18	77	Live	LinStatic	-177.69	-320.38	-24.36	-173.65
Story1	W22	18	Wall	18	78	Live	LinStatic	-59.34	-296.71	-137.81	3.84
Story1	W22	18	Wall	18	80	Live	LinStatic	-75.09	-375.46	28.69	-72.38
Story1	W22	18	Wall	18	79	EQX	LinStatic	34.12	115.3	255.44	333.36
Story1	W22	18	Wall	18	77	EQX	LinStatic	-17.41	-142.36	239.3	167.44
Story1	W22	18	Wall	18	78	EQX	LinStatic	-28.93	-144.66	388.39	305.88
Story1	W22	18	Wall	18	80	EQX	LinStatic	22.6	113	404.53	474.85
Story1	W22	18	Wall	18	79	EQY	LinStatic	-202.22	-683.35	-1513.88	1090.09
Story1	W22	18	Wall	18	77	EQY	LinStatic	103.18	843.68	-1418.21	1939.17
Story1	W22	18	Wall	18	78	EQY	LinStatic	171.47	857.34	-2301.8	2841.6

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W22	18	Wall	18	80	EQY	LinStatic	-133.94	-669.69	-2397.47	2010.57
Story1	W22	18	Wall	18	79	Dead	Combination	-1258.07	-2606.5	978.37	-744.1
Story1	W22	18	Wall	18	77	Dead	Combination	-1156.94	-2100.87	-109.64	-1144.38
Story1	W22	18	Wall	18	78	Dead	Combination	-389.47	-1947.37	-853.09	-13.2
Story1	W22	18	Wall	18	80	Dead	Combination	-490.6	-2453.01	234.92	-462.87
Story1	W33	17	Wall	17	137	Self Weight	LinStatic	-794.83	-1580.59	577.06	-489.6
Story1	W33	17	Wall	17	81	Self Weight	LinStatic	-923.74	-2225.14	-1548.8	105.49
Story1	W33	17	Wall	17	82	Self Weight	LinStatic	-425.08	-2125.41	-139.49	-413.72
Story1	W33	17	Wall	17	138	Self Weight	LinStatic	-296.17	-1480.86	1986.38	1184.3
Story1	W33	17	Wall	17	137	Super Dead	LinStatic	-95.04	-189.54	64.69	-62.18
Story1	W33	17	Wall	17	81	Super Dead	LinStatic	-109.78	-263.23	-190.06	18.46
Story1	W33	17	Wall	17	82	Super Dead	LinStatic	-50.27	-251.33	-20.36	-48.23
Story1	W33	17	Wall	17	138	Super Dead	LinStatic	-35.53	-177.64	234.39	138.34
Story1	W33	17	Wall	17	137	Live	LinStatic	-137.3	-273.8	93.63	-89.68
Story1	W33	17	Wall	17	81	Live	LinStatic	-158.61	-380.38	-274.37	26.43
Story1	W33	17	Wall	17	82	Live	LinStatic	-72.64	-363.19	-29.27	-69.72
Story1	W33	17	Wall	17	138	Live	LinStatic	-51.32	-256.6	338.73	199.98
Story1	W33	17	Wall	17	137	EQX	LinStatic	63.63	158.32	207.86	324.16
Story1	W33	17	Wall	17	81	EQX	LinStatic	35.24	16.33	410.61	436.5
Story1	W33	17	Wall	17	82	EQX	LinStatic	1.93	9.67	220.1	225.93
Story1	W33	17	Wall	17	138	EQX	LinStatic	30.33	151.66	17.35	154.09
Story1	W33	17	Wall	17	137	EQY	LinStatic	-377.13	-938.28	-1231.87	605.72
Story1	W33	17	Wall	17	81	EQY	LinStatic	-208.82	-96.77	-2433.45	2281.3
Story1	W33	17	Wall	17	82	EQY	LinStatic	-11.46	-57.29	-1304.39	1270.22
Story1	W33	17	Wall	17	138	EQY	LinStatic	-179.76	-898.8	-102.82	-165.35
Story1	W33	17	Wall	17	137	Dead	Combination	-889.87	-1770.13	641.76	-551.82
Story1	W33	17	Wall	17	81	Dead	Combination	-1033.52	-2488.38	-1738.86	123.93
Story1	W33	17	Wall	17	82	Dead	Combination	-475.35	-2376.74	-159.85	-462
Story1	W33	17	Wall	17	138	Dead	Combination	-331.7	-1658.5	2220.77	1322.64
Story1	W3	38	Wall	38	276	Self Weight	LinStatic	-614.69	-1929.19	670.92	-332.73
Story1	W3	38	Wall	38	5	Self Weight	LinStatic	-606.84	-1889.93	-173.56	-583.78
Story1	W3	38	Wall	38	6	Self Weight	LinStatic	-368.45	-1842.25	-381.03	-275.77
Story1	W3	38	Wall	38	7	Self Weight	LinStatic	-376.3	-1881.51	463.46	-245.05
Story1	W3	38	Wall	38	276	Super Dead	LinStatic	-13.09	-40.76	15.31	-6.29
Story1	W3	38	Wall	38	5	Super Dead	LinStatic	-13.02	-40.4	-2.75	-12.74
Story1	W3	38	Wall	38	6	Super Dead	LinStatic	-7.87	-39.37	-7.13	-6.34
Story1	W3	38	Wall	38	7	Super Dead	LinStatic	-7.95	-39.73	10.93	-4.55
Story1	W3	38	Wall	38	276	Live	LinStatic	-21.33	-66.51	24.73	-10.43
Story1	W3	38	Wall	38	5	Live	LinStatic	-21.2	-65.82	-4.69	-20.71
Story1	W3	38	Wall	38	6	Live	LinStatic	-12.83	-64.15	-11.84	-10.23
Story1	W3	38	Wall	38	7	Live	LinStatic	-12.97	-64.84	17.58	-7.57
Story1	W3	38	Wall	38	276	EQX	LinStatic	128.69	5.98	-1428.61	1497.26
Story1	W3	38	Wall	38	5	EQX	LinStatic	247.15	598.27	-1150.45	1586.48
Story1	W3	38	Wall	38	6	EQX	LinStatic	114.34	571.71	-1152.38	1517.88
Story1	W3	38	Wall	38	7	EQX	LinStatic	-4.12	-20.58	-1430.54	1418.21

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W3	38	Wall	38	276	EQY	LinStatic	2.41	0.11	-26.76	28.04
Story1	W3	38	Wall	38	5	EQY	LinStatic	4.63	11.21	-21.55	29.71
Story1	W3	38	Wall	38	6	EQY	LinStatic	2.14	10.71	-21.58	28.43
Story1	W3	38	Wall	38	7	EQY	LinStatic	-0.08	-0.39	-26.79	26.56
Story1	W3	38	Wall	38	276	Dead	Combination	-627.78	-1969.95	686.24	-339.03
Story1	W3	38	Wall	38	5	Dead	Combination	-619.86	-1930.33	-176.31	-596.55
Story1	W3	38	Wall	38	6	Dead	Combination	-376.33	-1881.63	-388.16	-282.13
Story1	W3	38	Wall	38	7	Dead	Combination	-384.25	-1921.24	474.39	-249.62
Story1	W6	37	Wall	37	278	Self Weight	LinStatic	-702.92	-1906.71	490.66	-528.26
Story1	W6	37	Wall	37	8	Self Weight	LinStatic	-708.07	-1932.48	-337.49	-621.21
Story1	W6	37	Wall	37	9	Self Weight	LinStatic	-373.1	-1865.49	-325.45	-305.22
Story1	W6	37	Wall	37	23	Self Weight	LinStatic	-367.94	-1839.71	502.71	-212.63
Story1	W6	37	Wall	37	278	Super Dead	LinStatic	-14.82	-40.13	11.66	-10.27
Story1	W6	37	Wall	37	8	Super Dead	LinStatic	-15	-41.03	-5.89	-13.73
Story1	W6	37	Wall	37	9	Super Dead	LinStatic	-7.92	-39.62	-5.55	-6.98
Story1	W6	37	Wall	37	23	Super Dead	LinStatic	-7.74	-38.71	12	-3.64
Story1	W6	37	Wall	37	278	Live	LinStatic	-24.19	-65.52	18.73	-16.96
Story1	W6	37	Wall	37	8	Live	LinStatic	-24.47	-66.91	-9.9	-22.27
Story1	W6	37	Wall	37	9	Live	LinStatic	-12.92	-64.6	-9.36	-11.28
Story1	W6	37	Wall	37	23	Live	LinStatic	-12.64	-63.21	19.27	-6.14
Story1	W6	37	Wall	37	278	EQX	LinStatic	-35.07	-188.04	-1622.27	1512.51
Story1	W6	37	Wall	37	8	EQX	LinStatic	55.46	264.63	-1546.69	1710.27
Story1	W6	37	Wall	37	9	EQX	LinStatic	52.82	264.11	-1655.5	1817.33
Story1	W6	37	Wall	37	23	EQX	LinStatic	-37.71	-188.57	-1731.08	1619.58
Story1	W6	37	Wall	37	278	EQY	LinStatic	-0.66	-3.52	-30.38	28.33
Story1	W6	37	Wall	37	8	EQY	LinStatic	1.04	4.96	-28.97	32.03
Story1	W6	37	Wall	37	9	EQY	LinStatic	0.99	4.95	-31.01	34.04
Story1	W6	37	Wall	37	23	EQY	LinStatic	-0.71	-3.53	-32.42	30.33
Story1	W6	37	Wall	37	278	Dead	Combination	-717.74	-1946.84	502.32	-538.56
Story1	W6	37	Wall	37	8	Dead	Combination	-723.07	-1973.52	-343.38	-634.98
Story1	W6	37	Wall	37	9	Dead	Combination	-381.02	-1905.11	-331	-312.24
Story1	W6	37	Wall	37	23	Dead	Combination	-375.69	-1878.43	514.71	-216.3
Story1	W11	39	Wall	39	57	Self Weight	LinStatic	-320.3	-2509.07	306.38	-278.23
Story1	W11	39	Wall	39	93	Self Weight	LinStatic	-114.02	-1477.65	-8.01	-113.97
Story1	W11	39	Wall	39	94	Self Weight	LinStatic	-303.09	-1515.46	-245.94	-255.1
Story1	W11	39	Wall	39	58	Self Weight	LinStatic	-509.38	-2546.89	68.45	-507.08
Story1	W11	39	Wall	39	57	Super Dead	LinStatic	-6.89	-53.63	6.99	-5.87
Story1	W11	39	Wall	39	93	Super Dead	LinStatic	-2.49	-31.61	0.19	-2.48
Story1	W11	39	Wall	39	94	Super Dead	LinStatic	-6.48	-32.41	-5	-5.55
Story1	W11	39	Wall	39	58	Super Dead	LinStatic	-10.89	-54.43	1.79	-10.81
Story1	W11	39	Wall	39	57	Live	LinStatic	-11.22	-87.38	11.28	-9.58
Story1	W11	39	Wall	39	93	Live	LinStatic	-4.04	-51.49	0.23	-4.04
Story1	W11	39	Wall	39	94	Live	LinStatic	-10.56	-52.8	-8.21	-9.02
Story1	W11	39	Wall	39	58	Live	LinStatic	-17.74	-88.68	2.84	-17.62
Story1	W11	39	Wall	39	57	EQX	LinStatic	154.84	789.47	-644.19	1190.26



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W11	39	Wall	39	93	EQX	LinStatic	95.96	495.09	-454.65	792.04
Story1	W11	39	Wall	39	94	EQX	LinStatic	99.15	495.73	-241.74	610.1
Story1	W11	39	Wall	39	58	EQX	LinStatic	158.02	790.11	-431.29	1008.76
Story1	W11	39	Wall	39	57	EQY	LinStatic	2.9	14.79	-12.07	22.29
Story1	W11	39	Wall	39	93	EQY	LinStatic	1.8	9.27	-8.52	14.83
Story1	W11	39	Wall	39	94	EQY	LinStatic	1.86	9.28	-4.53	11.43
Story1	W11	39	Wall	39	58	EQY	LinStatic	2.96	14.8	-8.08	18.89
Story1	W11	39	Wall	39	57	Dead	Combination	-327.19	-2562.71	313.37	-284.1
Story1	W11	39	Wall	39	93	Dead	Combination	-116.5	-1509.26	-7.81	-116.46
Story1	W11	39	Wall	39	94	Dead	Combination	-309.57	-1547.87	-250.94	-260.65
Story1	W11	39	Wall	39	58	Dead	Combination	-520.26	-2601.32	70.24	-517.9
Story1	W15	36	Wall	36	284	Self Weight	LinStatic	-709.22	-1923.95	471.12	-547.92
Story1	W15	36	Wall	36	86	Self Weight	LinStatic	-710.18	-1928.73	-360.39	-611.57
Story1	W15	36	Wall	36	213	Self Weight	LinStatic	-372.23	-1861.14	-371.41	-284.72
Story1	W15	36	Wall	36	214	Self Weight	LinStatic	-371.27	-1856.36	460.1	-240.28
Story1	W15	36	Wall	36	284	Super Dead	LinStatic	-14.76	-40.22	10.99	-10.67
Story1	W15	36	Wall	36	86	Super Dead	LinStatic	-14.88	-40.83	-6.47	-13.36
Story1	W15	36	Wall	36	213	Super Dead	LinStatic	-7.89	-39.43	-6.54	-6.59
Story1	W15	36	Wall	36	214	Super Dead	LinStatic	-7.76	-38.82	10.93	-4.31
Story1	W15	36	Wall	36	284	Live	LinStatic	-24.13	-65.73	17.7	-17.62
Story1	W15	36	Wall	36	86	Live	LinStatic	-24.31	-66.61	-10.82	-21.7
Story1	W15	36	Wall	36	213	Live	LinStatic	-12.86	-64.32	-10.96	-10.63
Story1	W15	36	Wall	36	214	Live	LinStatic	-12.69	-63.44	17.55	-7.21
Story1	W15	36	Wall	36	284	EQX	LinStatic	-282.38	-527.28	-1302.82	903.73
Story1	W15	36	Wall	36	86	EQX	LinStatic	-154.73	110.98	-1433.63	1417.89
Story1	W15	36	Wall	36	213	EQX	LinStatic	29.57	147.84	-1641.9	1731.66
Story1	W15	36	Wall	36	214	EQX	LinStatic	-98.08	-490.42	-1511.09	1229.52
Story1	W15	36	Wall	36	284	EQY	LinStatic	-5.29	-9.88	-24.4	16.93
Story1	W15	36	Wall	36	86	EQY	LinStatic	-2.9	2.08	-26.85	26.56
Story1	W15	36	Wall	36	213	EQY	LinStatic	0.55	2.77	-30.75	32.43
Story1	W15	36	Wall	36	214	EQY	LinStatic	-1.84	-9.19	-28.3	23.03
Story1	W15	36	Wall	36	284	Dead	Combination	-723.98	-1964.17	482.11	-558.61
Story1	W15	36	Wall	36	86	Dead	Combination	-725.05	-1969.56	-366.86	-624.96
Story1	W15	36	Wall	36	213	Dead	Combination	-380.12	-1900.58	-377.94	-291.35
Story1	W15	36	Wall	36	214	Dead	Combination	-379.04	-1895.18	471.03	-244.62
Story1	W21	35	Wall	35	283	Self Weight	LinStatic	-614.22	-1859.15	429.68	-480.32
Story1	W21	35	Wall	35	215	Self Weight	LinStatic	-636.11	-1968.6	-480.45	-480.95
Story1	W21	35	Wall	35	216	Self Weight	LinStatic	-383.62	-1918.11	-371.02	-298.62
Story1	W21	35	Wall	35	217	Self Weight	LinStatic	-361.73	-1808.65	539.1	-182.96
Story1	W21	35	Wall	35	283	Super Dead	LinStatic	-12.94	-38.88	9.76	-9.68
Story1	W21	35	Wall	35	215	Super Dead	LinStatic	-13.41	-41.22	-8.99	-10.76
Story1	W21	35	Wall	35	216	Super Dead	LinStatic	-8.03	-40.14	-7.38	-6.41
Story1	W21	35	Wall	35	217	Super Dead	LinStatic	-7.56	-37.8	11.37	-3.76
Story1	W21	35	Wall	35	283	Live	LinStatic	-21.13	-63.53	15.76	-15.91
Story1	W21	35	Wall	35	215	Live	LinStatic	-21.89	-67.35	-14.94	-17.42

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W21	35	Wall	35	216	Live	LinStatic	-13.12	-65.59	-12.15	-10.44
Story1	W21	35	Wall	35	217	Live	LinStatic	-12.36	-61.78	18.56	-6.16
Story1	W21	35	Wall	35	283	EQX	LinStatic	-38.17	-496.4	-849.93	612.98
Story1	W21	35	Wall	35	215	EQX	LinStatic	-30.73	-459.19	-1447.84	1218.65
Story1	W21	35	Wall	35	216	EQX	LinStatic	-94.38	-471.92	-573.87	320.97
Story1	W21	35	Wall	35	217	EQX	LinStatic	-101.83	-509.13	24.04	-100.41
Story1	W21	35	Wall	35	283	EQY	LinStatic	-0.71	-9.3	-15.92	11.48
Story1	W21	35	Wall	35	215	EQY	LinStatic	-0.58	-8.6	-27.12	22.82
Story1	W21	35	Wall	35	216	EQY	LinStatic	-1.77	-8.84	-10.75	6.01
Story1	W21	35	Wall	35	217	EQY	LinStatic	-1.91	-9.54	0.45	-1.88
Story1	W21	35	Wall	35	283	Dead	Combination	-627.16	-1898.03	439.43	-490.02
Story1	W21	35	Wall	35	215	Dead	Combination	-649.52	-2009.82	-489.44	-491.72
Story1	W21	35	Wall	35	216	Dead	Combination	-391.65	-1958.25	-378.4	-305.04
Story1	W21	35	Wall	35	217	Dead	Combination	-369.29	-1846.46	550.47	-186.72
Story1	W27	32	Wall	32	228	Self Weight	LinStatic	-739.86	-2008.64	504.64	-563.63
Story1	W27	32	Wall	32	218	Self Weight	LinStatic	-713.74	-1878.05	-272.94	-652.94
Story1	W27	32	Wall	32	219	Self Weight	LinStatic	-361.52	-1807.61	-458.22	-228.55
Story1	W27	32	Wall	32	229	Self Weight	LinStatic	-387.64	-1938.19	319.35	-324.44
Story1	W27	32	Wall	32	228	Super Dead	LinStatic	-15.75	-42.64	11.61	-11.43
Story1	W27	32	Wall	32	218	Super Dead	LinStatic	-15.28	-40.27	-5.27	-14.21
Story1	W27	32	Wall	32	219	Super Dead	LinStatic	-7.75	-38.76	-9.46	-5.09
Story1	W27	32	Wall	32	229	Super Dead	LinStatic	-8.23	-41.14	7.42	-6.63
Story1	W27	32	Wall	32	228	Live	LinStatic	-25.68	-69.54	18.72	-18.77
Story1	W27	32	Wall	32	218	Live	LinStatic	-24.88	-65.58	-8.71	-23.1
Story1	W27	32	Wall	32	219	Live	LinStatic	-12.62	-63.12	-15.49	-8.25
Story1	W27	32	Wall	32	229	Live	LinStatic	-13.42	-67.09	11.95	-10.88
Story1	W27	32	Wall	32	228	EQX	LinStatic	153.11	264.03	-1185.7	1395.57
Story1	W27	32	Wall	32	218	EQX	LinStatic	249.41	745.5	-619.28	1164.57
Story1	W27	32	Wall	32	219	EQX	LinStatic	144.92	724.6	-272.05	832.28
Story1	W27	32	Wall	32	229	EQX	LinStatic	48.63	243.13	-838.47	989.97
Story1	W27	32	Wall	32	228	EQY	LinStatic	2.87	4.95	-22.21	26.14
Story1	W27	32	Wall	32	218	EQY	LinStatic	4.67	13.96	-11.6	21.81
Story1	W27	32	Wall	32	219	EQY	LinStatic	2.71	13.57	-5.1	15.59
Story1	W27	32	Wall	32	229	EQY	LinStatic	0.91	4.55	-15.7	18.54
Story1	W27	32	Wall	32	228	Dead	Combination	-755.61	-2051.28	516.24	-575.07
Story1	W27	32	Wall	32	218	Dead	Combination	-729.02	-1918.32	-278.21	-667.16
Story1	W27	32	Wall	32	219	Dead	Combination	-369.27	-1846.37	-467.69	-233.65
Story1	W27	32	Wall	32	229	Dead	Combination	-395.87	-1979.33	326.77	-331.08
Story1	W35	31	Wall	31	235	Self Weight	LinStatic	-639.66	-1922.14	353.14	-548.85
Story1	W35	31	Wall	31	233	Self Weight	LinStatic	-654.08	-1994.22	-538.84	-464.3
Story1	W35	31	Wall	31	234	Self Weight	LinStatic	-388.21	-1941.05	-302.2	-331.47
Story1	W35	31	Wall	31	236	Self Weight	LinStatic	-373.79	-1868.96	589.79	-169.15
Story1	W35	31	Wall	31	235	Super Dead	LinStatic	-13.85	-40.65	8.71	-11.27
Story1	W35	31	Wall	31	233	Super Dead	LinStatic	-14.21	-42.44	-10.09	-10.97
Story1	W35	31	Wall	31	234	Super Dead	LinStatic	-8.25	-41.25	-5.27	-7.43



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W35	31	Wall	31	236	Super Dead	LinStatic	-7.89	-39.46	13.52	-2.89
Story1	W35	31	Wall	31	235	Live	LinStatic	-22.52	-66.32	13.93	-18.47
Story1	W35	31	Wall	31	233	Live	LinStatic	-23.1	-69.19	-16.76	-17.65
Story1	W35	31	Wall	31	234	Live	LinStatic	-13.45	-67.26	-8.86	-12.03
Story1	W35	31	Wall	31	236	Live	LinStatic	-12.88	-64.39	21.83	-4.87
Story1	W35	31	Wall	31	235	EQX	LinStatic	420.59	56.3	-1563.88	1812.89
Story1	W35	31	Wall	31	233	EQX	LinStatic	488.79	397.29	-1619.59	2063.28
Story1	W35	31	Wall	31	234	EQX	LinStatic	62.4	312.01	-1391.29	1584.08
Story1	W35	31	Wall	31	236	EQX	LinStatic	-5.8	-28.98	-1335.57	1318.23
Story1	W35	31	Wall	31	235	EQY	LinStatic	7.88	1.05	-29.29	33.95
Story1	W35	31	Wall	31	233	EQY	LinStatic	9.15	7.44	-30.33	38.64
Story1	W35	31	Wall	31	234	EQY	LinStatic	1.17	5.84	-26.06	29.67
Story1	W35	31	Wall	31	236	EQY	LinStatic	-0.11	-0.54	-25.01	24.69
Story1	W35	31	Wall	31	235	Dead	Combination	-653.51	-1962.79	361.85	-560.16
Story1	W35	31	Wall	31	233	Dead	Combination	-668.29	-2036.67	-548.93	-475.3
Story1	W35	31	Wall	31	234	Dead	Combination	-396.46	-1982.3	-307.47	-338.93
Story1	W35	31	Wall	31	236	Dead	Combination	-381.68	-1908.42	603.31	-172.06
Story1	W39	29	Wall	29	243	Self Weight	LinStatic	-725.07	-1943.06	423.81	-592.12
Story1	W39	29	Wall	29	241	Self Weight	LinStatic	-725.06	-1943.03	-315.31	-648.28
Story1	W39	29	Wall	29	242	Self Weight	LinStatic	-374.59	-1872.93	-508.72	-218.19
Story1	W39	29	Wall	29	244	Self Weight	LinStatic	-374.59	-1872.97	230.4	-339.97
Story1	W39	29	Wall	29	243	Super Dead	LinStatic	-15.08	-40.81	10.42	-11.38
Story1	W39	29	Wall	29	241	Super Dead	LinStatic	-15.14	-41.15	-5.28	-14.11
Story1	W39	29	Wall	29	242	Super Dead	LinStatic	-7.94	-39.71	-9.45	-5.35
Story1	W39	29	Wall	29	244	Super Dead	LinStatic	-7.87	-39.37	6.26	-6.68
Story1	W39	29	Wall	29	243	Live	LinStatic	-24.66	-66.65	16.68	-18.84
Story1	W39	29	Wall	29	241	Live	LinStatic	-24.75	-67.13	-8.93	-22.95
Story1	W39	29	Wall	29	242	Live	LinStatic	-12.95	-64.77	-15.71	-8.56
Story1	W39	29	Wall	29	244	Live	LinStatic	-12.86	-64.3	9.9	-11.02
Story1	W39	29	Wall	29	243	EQX	LinStatic	-301.53	-290.99	-1844.36	1548.1
Story1	W39	29	Wall	29	241	EQX	LinStatic	-216.05	136.45	-1729.36	1698.52
Story1	W39	29	Wall	29	242	EQX	LinStatic	37.43	187.15	-1629.05	1743.06
Story1	W39	29	Wall	29	244	EQX	LinStatic	-48.06	-240.3	-1744.05	1602.52
Story1	W39	29	Wall	29	243	EQY	LinStatic	-5.65	-5.45	-34.54	28.99
Story1	W39	29	Wall	29	241	EQY	LinStatic	-4.05	2.56	-32.39	31.81
Story1	W39	29	Wall	29	242	EQY	LinStatic	0.7	3.51	-30.51	32.65
Story1	W39	29	Wall	29	244	EQY	LinStatic	-0.9	-4.5	-32.66	30.01
Story1	W39	29	Wall	29	243	Dead	Combination	-740.15	-1983.88	434.23	-603.54
Story1	W39	29	Wall	29	241	Dead	Combination	-740.21	-1984.18	-320.59	-662.45
Story1	W39	29	Wall	29	242	Dead	Combination	-382.53	-1912.64	-518.17	-223.57
Story1	W39	29	Wall	29	244	Dead	Combination	-382.47	-1912.34	236.66	-346.7
Story1	W41	28	Wall	28	247	Self Weight	LinStatic	-610.25	-1852.44	184.58	-583.4
Story1	W41	28	Wall	28	245	Self Weight	LinStatic	-633.29	-1967.65	-651.96	-367.63
Story1	W41	28	Wall	28	246	Self Weight	LinStatic	-383.54	-1917.7	-419.23	-276.46
Story1	W41	28	Wall	28	248	Self Weight	LinStatic	-360.5	-1802.49	417.31	-248.44

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W41	28	Wall	28	247	Super Dead	LinStatic	-12.65	-38.63	4.86	-11.76
Story1	W41	28	Wall	28	245	Super Dead	LinStatic	-13.23	-41.54	-12.62	-8.42
Story1	W41	28	Wall	28	246	Super Dead	LinStatic	-8.1	-40.52	-7.69	-6.37
Story1	W41	28	Wall	28	248	Super Dead	LinStatic	-7.52	-37.6	9.79	-4.61
Story1	W41	28	Wall	28	247	Live	LinStatic	-20.69	-63.15	7.72	-19.33
Story1	W41	28	Wall	28	245	Live	LinStatic	-21.62	-67.8	-20.86	-13.59
Story1	W41	28	Wall	28	246	Live	LinStatic	-13.22	-66.12	-12.82	-10.28
Story1	W41	28	Wall	28	248	Live	LinStatic	-12.29	-61.47	15.76	-7.68
Story1	W41	28	Wall	28	247	EQX	LinStatic	-307.65	-629.91	-1210.2	752.09
Story1	W41	28	Wall	28	245	EQX	LinStatic	-186.89	-26.08	-1440.83	1336.58
Story1	W41	28	Wall	28	246	EQX	LinStatic	2.35	11.76	-1455.47	1462.53
Story1	W41	28	Wall	28	248	EQX	LinStatic	-118.41	-592.06	-1224.84	892.28
Story1	W41	28	Wall	28	247	EQY	LinStatic	-5.76	-11.8	-22.67	14.09
Story1	W41	28	Wall	28	245	EQY	LinStatic	-3.5	-0.49	-26.99	25.03
Story1	W41	28	Wall	28	246	EQY	LinStatic	0.04	0.22	-27.26	27.39
Story1	W41	28	Wall	28	248	EQY	LinStatic	-2.22	-11.09	-22.94	16.71
Story1	W41	28	Wall	28	247	Dead	Combination	-622.9	-1891.07	189.44	-595.2
Story1	W41	28	Wall	28	245	Dead	Combination	-646.52	-2009.19	-664.59	-376.07
Story1	W41	28	Wall	28	246	Dead	Combination	-391.64	-1958.22	-426.92	-282.86
Story1	W41	28	Wall	28	248	Dead	Combination	-368.02	-1840.1	427.11	-253.07
Story1	W43	27	Wall	27	67	Self Weight	LinStatic	-122.02	-1470.06	19.98	-121.72
Story1	W43	27	Wall	27	249	Self Weight	LinStatic	-326.31	-2491.51	-283.91	-289.7
Story1	W43	27	Wall	27	250	Self Weight	LinStatic	-505.47	-2527.34	-55.86	-503.93
Story1	W43	27	Wall	27	68	Self Weight	LinStatic	-301.18	-1505.89	248.02	-252.11
Story1	W43	27	Wall	27	67	Super Dead	LinStatic	-2.47	-30.64	0.8	-2.45
Story1	W43	27	Wall	27	249	Super Dead	LinStatic	-6.74	-51.99	-5.49	-6.09
Story1	W43	27	Wall	27	250	Super Dead	LinStatic	-10.55	-52.75	-0.84	-10.53
Story1	W43	27	Wall	27	68	Super Dead	LinStatic	-6.28	-31.4	5.44	-5.15
Story1	W43	27	Wall	27	67	Live	LinStatic	-4.06	-50.09	1.22	-4.03
Story1	W43	27	Wall	27	249	Live	LinStatic	-11.04	-84.99	-9.07	-9.94
Story1	W43	27	Wall	27	250	Live	LinStatic	-17.25	-86.23	-1.45	-17.22
Story1	W43	27	Wall	27	68	Live	LinStatic	-10.27	-51.34	8.84	-8.45
Story1	W43	27	Wall	27	67	EQX	LinStatic	-132.92	-518.72	-470.16	182.37
Story1	W43	27	Wall	27	249	EQX	LinStatic	-189.76	-802.9	-635.61	209.35
Story1	W43	27	Wall	27	250	EQX	LinStatic	-159.36	-796.82	-422.67	51.28
Story1	W43	27	Wall	27	68	EQX	LinStatic	-102.53	-512.65	-257.23	21.37
Story1	W43	27	Wall	27	67	EQY	LinStatic	-2.49	-9.72	-8.81	3.42
Story1	W43	27	Wall	27	249	EQY	LinStatic	-3.55	-15.04	-11.9	3.92
Story1	W43	27	Wall	27	250	EQY	LinStatic	-2.98	-14.92	-7.92	0.96
Story1	W43	27	Wall	27	68	EQY	LinStatic	-1.92	-9.6	-4.82	0.4
Story1	W43	27	Wall	27	67	Dead	Combination	-124.49	-1500.7	20.77	-124.18
Story1	W43	27	Wall	27	249	Dead	Combination	-333.05	-2543.5	-289.4	-295.79
Story1	W43	27	Wall	27	250	Dead	Combination	-516.02	-2580.09	-56.71	-514.46
Story1	W43	27	Wall	27	68	Dead	Combination	-307.46	-1537.3	253.47	-257.27
Story1	W23	40	Wall	40	139	Self Weight	LinStatic	-272.31	-1396.63	75.27	-267.3

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W23	40	Wall	40	402	Self Weight	LinStatic	-515.94	-2614.78	-84.18	-512.57
Story1	W23	40	Wall	40	96	Self Weight	LinStatic	-523.25	-2616.24	193.09	-505.58
Story1	W23	40	Wall	40	140	Self Weight	LinStatic	-279.62	-1398.09	352.54	-177.77
Story1	W23	40	Wall	40	139	Super Dead	LinStatic	-19.05	-79.4	-40.34	1.16
Story1	W23	40	Wall	40	402	Super Dead	LinStatic	-51.2	-240.16	-36.73	-44.31
Story1	W23	40	Wall	40	96	Super Dead	LinStatic	-47.9	-239.51	-15.67	-46.63
Story1	W23	40	Wall	40	140	Super Dead	LinStatic	-15.75	-78.74	-19.28	-10.31
Story1	W23	40	Wall	40	139	Live	LinStatic	-28.06	-118.22	-56.3	-1.01
Story1	W23	40	Wall	40	402	Live	LinStatic	-74.38	-349.86	-52	-64.9
Story1	W23	40	Wall	40	96	Live	LinStatic	-69.79	-348.94	-21.09	-68.2
Story1	W23	40	Wall	40	140	Live	LinStatic	-23.46	-117.3	-25.39	-17.03
Story1	W23	40	Wall	40	139	EQX	LinStatic	32.04	449.51	-530.73	811.08
Story1	W23	40	Wall	40	402	EQX	LinStatic	109.01	834.38	-303.37	944.53
Story1	W23	40	Wall	40	96	EQX	LinStatic	169.29	846.44	-342.61	989.54
Story1	W23	40	Wall	40	140	EQX	LinStatic	92.31	461.57	-569.97	876.07
Story1	W23	40	Wall	40	139	EQY	LinStatic	-217.22	-99.05	-370.54	217.09
Story1	W23	40	Wall	40	402	EQY	LinStatic	-123.75	368.28	-227.1	457.08
Story1	W23	40	Wall	40	96	EQY	LinStatic	81.88	409.41	-23.7	411.12
Story1	W23	40	Wall	40	140	EQY	LinStatic	-11.58	-57.92	-167.14	133.99
Story1	W23	40	Wall	40	139	Dead	Combination	-291.36	-1476.02	34.93	-290.33
Story1	W23	40	Wall	40	402	Dead	Combination	-567.14	-2854.94	-120.92	-560.77
Story1	W23	40	Wall	40	96	Dead	Combination	-571.15	-2855.75	177.41	-557.45
Story1	W23	40	Wall	40	140	Dead	Combination	-295.37	-1476.83	333.26	-207.85
Story1	W32	51	Wall	51	383	Self Weight	LinStatic	-687.46	-2102.57	129.43	-675.72
Story1	W32	51	Wall	51	403	Self Weight	LinStatic	-716.15	-2246.04	298.15	-660.1
Story1	W32	51	Wall	51	238	Self Weight	LinStatic	-438.08	-2190.42	133.79	-427.93
Story1	W32	51	Wall	51	460	Self Weight	LinStatic	-409.39	-2046.96	-34.93	-408.65
Story1	W32	51	Wall	51	383	Super Dead	LinStatic	-15.55	-45.78	4.02	-15.02
Story1	W32	51	Wall	51	403	Super Dead	LinStatic	-16.15	-48.8	7.33	-14.58
Story1	W32	51	Wall	51	238	Super Dead	LinStatic	-9.49	-47.47	3.94	-9.09
Story1	W32	51	Wall	51	460	Super Dead	LinStatic	-8.89	-44.45	0.62	-8.88
Story1	W32	51	Wall	51	383	Live	LinStatic	-25.13	-74.4	6.27	-24.35
Story1	W32	51	Wall	51	403	Live	LinStatic	-26.12	-79.32	11.73	-23.65
Story1	W32	51	Wall	51	238	Live	LinStatic	-15.44	-77.19	6.17	-14.83
Story1	W32	51	Wall	51	460	Live	LinStatic	-14.45	-72.26	0.71	-14.44
Story1	W32	51	Wall	51	383	EQX	LinStatic	1281.92	1713.08	-1610.11	3121.98
Story1	W32	51	Wall	51	403	EQX	LinStatic	1278.1	1694	-1292.65	2795.32
Story1	W32	51	Wall	51	238	EQX	LinStatic	299.66	1498.31	-1389.67	2412.39
Story1	W32	51	Wall	51	460	EQX	LinStatic	303.48	1517.39	-1707.13	2722.26
Story1	W32	51	Wall	51	383	EQY	LinStatic	24.01	32.08	-30.16	58.47
Story1	W32	51	Wall	51	403	EQY	LinStatic	23.94	31.73	-24.21	52.35
Story1	W32	51	Wall	51	238	EQY	LinStatic	5.61	28.06	-26.03	45.18
Story1	W32	51	Wall	51	460	EQY	LinStatic	5.68	28.42	-31.97	50.99
Story1	W32	51	Wall	51	383	Dead	Combination	-703	-2148.35	133.45	-690.79
Story1	W32	51	Wall	51	403	Dead	Combination	-732.3	-2294.84	305.48	-674.7

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W32	51	Wall	51	238	Dead	Combination	-447.58	-2237.89	137.73	-437.04
Story1	W32	51	Wall	51	460	Dead	Combination	-418.28	-2091.41	-34.3	-417.58
Story1	W38	52	Wall	52	397	Self Weight	LinStatic	-1404.87	-1506.81	409.13	-1043.55
Story1	W38	52	Wall	52	383	Self Weight	LinStatic	-1558.88	-2276.85	-27.93	-1557.79
Story1	W38	52	Wall	52	460	Self Weight	LinStatic	-409.39	-2046.96	-3.44	-409.38
Story1	W38	52	Wall	52	461	Self Weight	LinStatic	-255.38	-1276.92	433.61	-96.15
Story1	W38	52	Wall	52	397	Super Dead	LinStatic	-29.42	-30.94	11.36	-18.79
Story1	W38	52	Wall	52	383	Super Dead	LinStatic	-33.09	-49.29	2.5	-32.72
Story1	W38	52	Wall	52	460	Super Dead	LinStatic	-8.89	-44.45	1.39	-8.84
Story1	W38	52	Wall	52	461	Super Dead	LinStatic	-5.22	-26.1	10.26	-1.02
Story1	W38	52	Wall	52	397	Live	LinStatic	-48.07	-50.69	17.92	-31.41
Story1	W38	52	Wall	52	383	Live	LinStatic	-53.97	-80.17	3.38	-53.54
Story1	W38	52	Wall	52	460	Live	LinStatic	-14.45	-72.26	1.94	-14.39
Story1	W38	52	Wall	52	461	Live	LinStatic	-8.56	-42.79	16.49	-1.91
Story1	W38	52	Wall	52	397	EQX	LinStatic	-319.76	-1116.67	-3408.97	2713.96
Story1	W38	52	Wall	52	383	EQX	LinStatic	203.03	1497.3	-3872.28	4776.15
Story1	W38	52	Wall	52	460	EQX	LinStatic	303.48	1517.39	-1837.22	2845.32
Story1	W38	52	Wall	52	461	EQX	LinStatic	-219.32	-1096.58	-1373.91	784.28
Story1	W38	52	Wall	52	397	EQY	LinStatic	-5.99	-20.91	-63.85	50.83
Story1	W38	52	Wall	52	383	EQY	LinStatic	3.8	28.04	-72.52	89.45
Story1	W38	52	Wall	52	460	EQY	LinStatic	5.68	28.42	-34.41	53.29
Story1	W38	52	Wall	52	461	EQY	LinStatic	-4.11	-20.54	-25.73	14.69
Story1	W38	52	Wall	52	397	Dead	Combination	-1434.29	-1537.75	420.49	-1062.36
Story1	W38	52	Wall	52	383	Dead	Combination	-1591.97	-2326.15	-25.43	-1591.09
Story1	W38	52	Wall	52	460	Dead	Combination	-418.28	-2091.41	-2.04	-418.28
Story1	W38	52	Wall	52	461	Dead	Combination	-260.6	-1303.02	443.87	-97.21
Story1	W40	53	Wall	53	471	Self Weight	LinStatic	-198.34	-2293.52	-895.75	132.41
Story1	W40	53	Wall	53	397	Self Weight	LinStatic	15.83	-1222.68	-252.91	65.48
Story1	W40	53	Wall	53	461	Self Weight	LinStatic	-255.38	-1276.92	447.43	-87.13
Story1	W40	53	Wall	53	240	Self Weight	LinStatic	-469.55	-2347.76	-195.41	-449.44
Story1	W40	53	Wall	53	471	Super Dead	LinStatic	-3.57	-48.61	-17.5	2.43
Story1	W40	53	Wall	53	397	Super Dead	LinStatic	1.19	-24.82	-3.88	1.75
Story1	W40	53	Wall	53	461	Super Dead	LinStatic	-5.22	-26.1	10.76	-0.67
Story1	W40	53	Wall	53	240	Super Dead	LinStatic	-9.98	-49.89	-2.87	-9.77
Story1	W40	53	Wall	53	471	Live	LinStatic	-5.97	-79.29	-28.89	4.04
Story1	W40	53	Wall	53	397	Live	LinStatic	1.74	-40.73	-6.66	2.77
Story1	W40	53	Wall	53	461	Live	LinStatic	-8.56	-42.79	17.26	-1.37
Story1	W40	53	Wall	53	240	Live	LinStatic	-16.27	-81.35	-4.97	-15.89
Story1	W40	53	Wall	53	471	EQX	LinStatic	-775.81	203.58	-1777.92	1558.01
Story1	W40	53	Wall	53	397	EQX	LinStatic	-1069.87	-1266.69	-1833.78	668.13
Story1	W40	53	Wall	53	461	EQX	LinStatic	-219.32	-1096.58	-1635.55	1035.4
Story1	W40	53	Wall	53	240	EQX	LinStatic	74.74	373.69	-1579.7	1810.97
Story1	W40	53	Wall	53	471	EQY	LinStatic	-14.53	3.81	-33.3	29.18
Story1	W40	53	Wall	53	397	EQY	LinStatic	-20.04	-23.72	-34.35	12.51
Story1	W40	53	Wall	53	461	EQY	LinStatic	-4.11	-20.54	-30.63	19.39

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W40	53	Wall	53	240	EQY	LinStatic	1.4	7	-29.59	33.92
Story1	W40	53	Wall	53	471	Dead	Combination	-201.91	-2342.13	-913.26	134.81
Story1	W40	53	Wall	53	397	Dead	Combination	17.02	-1247.49	-256.79	67.17
Story1	W40	53	Wall	53	461	Dead	Combination	-260.6	-1303.02	458.19	-87.84
Story1	W40	53	Wall	53	240	Dead	Combination	-479.53	-2397.65	-198.28	-459.25
Story1	W44	54	Wall	54	382	Self Weight	LinStatic	378.5	-3019.63	1204.95	762.4
Story1	W44	54	Wall	54	237	Self Weight	LinStatic	-69.91	-5261.67	548.33	-12.63
Story1	W44	54	Wall	54	403	Self Weight	LinStatic	-1371.34	-5521.96	497.38	-1312.57
Story1	W44	54	Wall	54	383	Self Weight	LinStatic	-922.93	-3279.91	1154	-452.01
Story1	W44	54	Wall	54	382	Super Dead	LinStatic	7.57	-67.57	26.67	16.07
Story1	W44	54	Wall	54	237	Super Dead	LinStatic	-0.83	-109.56	12.3	0.54
Story1	W44	54	Wall	54	403	Super Dead	LinStatic	-29.45	-115.28	11.2	-28.01
Story1	W44	54	Wall	54	383	Super Dead	LinStatic	-21.05	-73.29	25.57	-10.62
Story1	W44	54	Wall	54	382	Live	LinStatic	12.45	-109.4	43.24	26.23
Story1	W44	54	Wall	54	237	Live	LinStatic	-1.5	-179.15	19.91	0.7
Story1	W44	54	Wall	54	403	Live	LinStatic	-47.94	-188.44	18.12	-45.64
Story1	W44	54	Wall	54	383	Live	LinStatic	-33.99	-118.69	41.45	-17.08
Story1	W44	54	Wall	54	382	EQX	LinStatic	535.79	4735.36	-1517.98	5226.6
Story1	W44	54	Wall	54	237	EQX	LinStatic	-809.32	-1990.18	-899.8	-323.53
Story1	W44	54	Wall	54	403	EQX	LinStatic	597.54	-1708.81	-873.29	890.9
Story1	W44	54	Wall	54	383	EQX	LinStatic	1942.65	5016.73	-1491.47	5621.42
Story1	W44	54	Wall	54	382	EQY	LinStatic	10.03	88.69	-28.43	97.89
Story1	W44	54	Wall	54	237	EQY	LinStatic	-15.16	-37.27	-16.85	-6.06
Story1	W44	54	Wall	54	403	EQY	LinStatic	11.19	-32	-16.36	16.69
Story1	W44	54	Wall	54	383	EQY	LinStatic	36.38	93.96	-27.93	105.28
Story1	W44	54	Wall	54	382	Dead	Combination	386.07	-3087.2	1231.61	778.47
Story1	W44	54	Wall	54	237	Dead	Combination	-70.74	-5371.23	560.63	-12.09
Story1	W44	54	Wall	54	403	Dead	Combination	-1400.78	-5637.24	508.58	-1340.58
Story1	W44	54	Wall	54	383	Dead	Combination	-943.97	-3353.2	1179.57	-462.63
Story1	W45	55	Wall	55	239	Self Weight	LinStatic	-1130.64	-2555.44	2264.53	530.9
Story1	W45	55	Wall	55	396	Self Weight	LinStatic	-963.05	-1717.49	-886.96	-376.43
Story1	W45	55	Wall	55	397	Self Weight	LinStatic	-46.47	-1534.17	-2454.47	1774.38
Story1	W45	55	Wall	55	471	Self Weight	LinStatic	-214.06	-2372.12	697.02	-8.51
Story1	W45	55	Wall	55	239	Super Dead	LinStatic	-23.93	-55.28	49.58	12.39
Story1	W45	55	Wall	55	396	Super Dead	LinStatic	-19.82	-34.75	-17.11	-8.62
Story1	W45	55	Wall	55	397	Super Dead	LinStatic	-0.01	-30.79	-50.34	37.24
Story1	W45	55	Wall	55	471	Super Dead	LinStatic	-4.11	-51.32	16.35	1
Story1	W45	55	Wall	55	239	Live	LinStatic	-39.03	-89.91	80.51	19.96
Story1	W45	55	Wall	55	396	Live	LinStatic	-32.46	-57.06	-28.3	-13.91
Story1	W45	55	Wall	55	397	Live	LinStatic	-0.23	-50.61	-82.49	60.82
Story1	W45	55	Wall	55	471	Live	LinStatic	-6.8	-83.47	26.32	1.36
Story1	W45	55	Wall	55	239	EQX	LinStatic	51.57	1625.22	-2180.31	3156.34
Story1	W45	55	Wall	55	396	EQX	LinStatic	-656.41	-1914.69	-2033.65	843.19
Story1	W45	55	Wall	55	397	EQX	LinStatic	-1222.1	-2027.83	-1895.82	313.19
Story1	W45	55	Wall	55	471	EQX	LinStatic	-514.11	1512.09	-2042.49	2778.93

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W45	55	Wall	55	239	EQY	LinStatic	0.97	30.44	-40.84	59.12
Story1	W45	55	Wall	55	396	EQY	LinStatic	-12.29	-35.86	-38.09	15.79
Story1	W45	55	Wall	55	397	EQY	LinStatic	-22.89	-37.98	-35.51	5.87
Story1	W45	55	Wall	55	471	EQY	LinStatic	-9.63	28.32	-38.25	52.05
Story1	W45	55	Wall	55	239	Dead	Combination	-1154.57	-2610.72	2314.11	543.3
Story1	W45	55	Wall	55	396	Dead	Combination	-982.87	-1752.24	-904.07	-385.05
Story1	W45	55	Wall	55	397	Dead	Combination	-46.48	-1564.96	-2504.8	1811.62
Story1	W45	55	Wall	55	471	Dead	Combination	-218.17	-2423.44	713.37	-7.53
Story1	W46	56	Wall	56	206	Self Weight	LinStatic	271.1	-1249.03	-582.27	468.5
Story1	W46	56	Wall	56	207	Self Weight	LinStatic	400.05	-604.26	-252.34	459.89
Story1	W46	56	Wall	56	200	Self Weight	LinStatic	-142.56	-712.78	-120.2	-118.26
Story1	W46	56	Wall	56	472	Self Weight	LinStatic	-271.51	-1357.56	-450.13	-109.2
Story1	W46	56	Wall	56	206	Super Dead	LinStatic	3.99	-27.51	-13.98	9.3
Story1	W46	56	Wall	56	207	Super Dead	LinStatic	6.89	-12.99	-8.14	9.8
Story1	W46	56	Wall	56	200	Super Dead	LinStatic	-2.99	-14.97	-4.65	-1.4
Story1	W46	56	Wall	56	472	Super Dead	LinStatic	-5.9	-29.49	-10.49	-1.91
Story1	W46	56	Wall	56	206	Live	LinStatic	6.9	-44.64	-22.43	15.3
Story1	W46	56	Wall	56	207	Live	LinStatic	11.6	-21.15	-12.65	15.92
Story1	W46	56	Wall	56	200	Live	LinStatic	-4.89	-24.45	-7.11	-2.58
Story1	W46	56	Wall	56	472	Live	LinStatic	-9.59	-47.94	-16.9	-3.21
Story1	W46	56	Wall	56	206	EQX	LinStatic	2178.25	1414.18	2106.53	3937.1
Story1	W46	56	Wall	56	207	EQX	LinStatic	1952.01	282.98	3522.79	4737.78
Story1	W46	56	Wall	56	200	EQX	LinStatic	-22.38	-111.89	2648.39	2581.63
Story1	W46	56	Wall	56	472	EQX	LinStatic	203.86	1019.3	1232.12	1909.41
Story1	W46	56	Wall	56	206	EQY	LinStatic	40.8	26.49	39.45	73.74
Story1	W46	56	Wall	56	207	EQY	LinStatic	36.56	5.3	65.98	88.73
Story1	W46	56	Wall	56	200	EQY	LinStatic	-0.42	-2.1	49.6	48.35
Story1	W46	56	Wall	56	472	EQY	LinStatic	3.82	19.09	23.08	35.76
Story1	W46	56	Wall	56	206	Dead	Combination	275.09	-1276.55	-596.25	477.74
Story1	W46	56	Wall	56	207	Dead	Combination	406.95	-617.25	-260.48	469.39
Story1	W46	56	Wall	56	200	Dead	Combination	-145.55	-727.75	-124.85	-119.91
Story1	W46	56	Wall	56	472	Dead	Combination	-277.41	-1387.05	-460.62	-111.12
Story1	W47	57	Wall	57	473	Self Weight	LinStatic	-1179.83	-1859.27	-1512.92	31.05
Story1	W47	57	Wall	57	206	Self Weight	LinStatic	-1113.16	-1525.88	-1056.44	-243.12
Story1	W47	57	Wall	57	472	Self Weight	LinStatic	-271.51	-1357.56	-994.65	318.69
Story1	W47	57	Wall	57	474	Self Weight	LinStatic	-338.19	-1690.94	-1451.14	586.46
Story1	W47	57	Wall	57	473	Super Dead	LinStatic	-27.4	-39.25	-32.72	-0.07
Story1	W47	57	Wall	57	206	Super Dead	LinStatic	-26.26	-33.56	-23.05	-6.57
Story1	W47	57	Wall	57	472	Super Dead	LinStatic	-5.9	-29.49	-21.73	7.03
Story1	W47	57	Wall	57	474	Super Dead	LinStatic	-7.04	-35.18	-31.39	13.29
Story1	W47	57	Wall	57	473	Live	LinStatic	-44.14	-64.06	-53.22	0.04
Story1	W47	57	Wall	57	206	Live	LinStatic	-42.23	-54.47	-37.45	-10.4
Story1	W47	57	Wall	57	472	Live	LinStatic	-9.59	-47.94	-35.29	11.4
Story1	W47	57	Wall	57	474	Live	LinStatic	-11.51	-57.53	-51.06	21.49
Story1	W47	57	Wall	57	473	EQX	LinStatic	3098.71	-32.64	951.03	3364.92



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W47	57	Wall	57	206	EQX	LinStatic	3438.48	1666.22	924.05	3832.62
Story1	W47	57	Wall	57	472	EQX	LinStatic	203.86	1019.3	897.09	1596.97
Story1	W47	57	Wall	57	474	EQX	LinStatic	-135.91	-679.56	924.06	555.48
Story1	W47	57	Wall	57	473	EQY	LinStatic	58.04	-0.61	17.81	63.02
Story1	W47	57	Wall	57	206	EQY	LinStatic	64.4	31.21	17.31	71.78
Story1	W47	57	Wall	57	472	EQY	LinStatic	3.82	19.09	16.8	29.91
Story1	W47	57	Wall	57	474	EQY	LinStatic	-2.55	-12.73	17.31	10.4
Story1	W47	57	Wall	57	473	Dead	Combination	-1207.23	-1898.52	-1545.64	30.95
Story1	W47	57	Wall	57	206	Dead	Combination	-1139.41	-1559.45	-1079.49	-249.7
Story1	W47	57	Wall	57	472	Dead	Combination	-277.41	-1387.05	-1016.38	325.72
Story1	W47	57	Wall	57	474	Dead	Combination	-345.22	-1726.12	-1482.53	599.75
Story1	W48	58	Wall	58	475	Self Weight	LinStatic	-876.8	-3103.42	-2038.87	332.91
Story1	W48	58	Wall	58	473	Self Weight	LinStatic	-604.98	-1744.3	-2133.1	1033.22
Story1	W48	58	Wall	58	474	Self Weight	LinStatic	-338.19	-1690.94	-1008.94	200.12
Story1	W48	58	Wall	58	476	Self Weight	LinStatic	-610.01	-3050.06	-914.71	-305.19
Story1	W48	58	Wall	58	475	Super Dead	LinStatic	-19.78	-66.29	-44.34	7.04
Story1	W48	58	Wall	58	473	Super Dead	LinStatic	-13.83	-36.54	-46.42	22.61
Story1	W48	58	Wall	58	474	Super Dead	LinStatic	-7.04	-35.18	-21.79	4.83
Story1	W48	58	Wall	58	476	Super Dead	LinStatic	-12.99	-64.93	-19.72	-6.35
Story1	W48	58	Wall	58	475	Live	LinStatic	-31.99	-108.01	-72.07	11.48
Story1	W48	58	Wall	58	473	Live	LinStatic	-22.33	-59.69	-75.44	36.71
Story1	W48	58	Wall	58	474	Live	LinStatic	-11.51	-57.53	-35.45	7.75
Story1	W48	58	Wall	58	476	Live	LinStatic	-21.17	-105.84	-32.08	-10.39
Story1	W48	58	Wall	58	475	EQX	LinStatic	1573.13	914.54	1595.54	2873
Story1	W48	58	Wall	58	473	EQX	LinStatic	1312.24	-389.93	1705.55	2367.26
Story1	W48	58	Wall	58	474	EQX	LinStatic	-135.91	-679.56	601.89	252.69
Story1	W48	58	Wall	58	476	EQX	LinStatic	124.98	624.91	491.88	926.7
Story1	W48	58	Wall	58	475	EQY	LinStatic	29.46	17.13	29.88	53.81
Story1	W48	58	Wall	58	473	EQY	LinStatic	24.58	-7.3	31.94	44.34
Story1	W48	58	Wall	58	474	EQY	LinStatic	-2.55	-12.73	11.27	4.73
Story1	W48	58	Wall	58	476	EQY	LinStatic	2.34	11.7	9.21	17.36
Story1	W48	58	Wall	58	475	Dead	Combination	-896.58	-3169.71	-2083.21	339.95
Story1	W48	58	Wall	58	473	Dead	Combination	-618.8	-1780.83	-2179.52	1055.81
Story1	W48	58	Wall	58	474	Dead	Combination	-345.22	-1726.12	-1030.74	204.95
Story1	W48	58	Wall	58	476	Dead	Combination	-623	-3114.99	-934.43	-311.54
Story1	W49	59	Wall	59	477	Self Weight	LinStatic	-573.27	-3289.22	-500.11	-484.11
Story1	W49	59	Wall	59	475	Self Weight	LinStatic	-521.92	-3032.44	-847.34	-262.69
Story1	W49	59	Wall	59	476	Self Weight	LinStatic	-610.01	-3050.06	-845.5	-345.67
Story1	W49	59	Wall	59	201	Self Weight	LinStatic	-661.37	-3306.84	-498.27	-570.63
Story1	W49	59	Wall	59	477	Super Dead	LinStatic	-12.78	-70.03	-10.72	-10.84
Story1	W49	59	Wall	59	475	Super Dead	LinStatic	-11.71	-64.68	-18.32	-6
Story1	W49	59	Wall	59	476	Super Dead	LinStatic	-12.99	-64.93	-18.3	-7.19
Story1	W49	59	Wall	59	201	Super Dead	LinStatic	-14.06	-70.28	-10.71	-12.09
Story1	W49	59	Wall	59	477	Live	LinStatic	-20.71	-114.15	-17.46	-17.55
Story1	W49	59	Wall	59	475	Live	LinStatic	-18.96	-105.4	-29.79	-9.69

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W49	59	Wall	59	476	Live	LinStatic	-21.17	-105.84	-29.76	-11.75
Story1	W49	59	Wall	59	201	Live	LinStatic	-22.92	-114.59	-17.43	-19.71
Story1	W49	59	Wall	59	477	EQX	LinStatic	844.38	679.05	199.31	977.49
Story1	W49	59	Wall	59	475	EQX	LinStatic	863.08	772.53	520.29	1340.06
Story1	W49	59	Wall	59	476	EQX	LinStatic	124.98	624.91	550.38	979.42
Story1	W49	59	Wall	59	201	EQX	LinStatic	106.29	531.43	229.4	631.6
Story1	W49	59	Wall	59	477	EQY	LinStatic	15.81	12.72	3.73	18.31
Story1	W49	59	Wall	59	475	EQY	LinStatic	16.16	14.47	9.74	25.1
Story1	W49	59	Wall	59	476	EQY	LinStatic	2.34	11.7	10.31	18.34
Story1	W49	59	Wall	59	201	EQY	LinStatic	1.99	9.95	4.3	11.83
Story1	W49	59	Wall	59	477	Dead	Combination	-586.06	-3359.25	-510.84	-494.95
Story1	W49	59	Wall	59	475	Dead	Combination	-533.63	-3097.12	-865.66	-268.69
Story1	W49	59	Wall	59	476	Dead	Combination	-623	-3114.99	-863.8	-352.86
Story1	W49	59	Wall	59	201	Dead	Combination	-675.42	-3377.12	-508.98	-582.72
Story1	W50	60	Wall	60	225	Self Weight	LinStatic	443.56	1141.09	-375.83	1305.05
Story1	W50	60	Wall	60	478	Self Weight	LinStatic	-341.82	-2785.82	126.9	-335.25
Story1	W50	60	Wall	60	206	Self Weight	LinStatic	-1407.78	-2999.01	-430.18	-1298.93
Story1	W50	60	Wall	60	473	Self Weight	LinStatic	-622.4	927.9	-932.91	1365.67
Story1	W50	60	Wall	60	225	Super Dead	LinStatic	9.93	27.81	-8.8	31.41
Story1	W50	60	Wall	60	478	Super Dead	LinStatic	-8.35	-63.59	1.14	-8.32
Story1	W50	60	Wall	60	206	Super Dead	LinStatic	-33.26	-68.57	-10.34	-30.46
Story1	W50	60	Wall	60	473	Super Dead	LinStatic	-14.98	22.83	-20.28	31.65
Story1	W50	60	Wall	60	225	Live	LinStatic	16.08	44.54	-14.16	50.38
Story1	W50	60	Wall	60	478	Live	LinStatic	-13.36	-102.68	2.22	-13.31
Story1	W50	60	Wall	60	206	Live	LinStatic	-53.47	-110.71	-16.58	-49.02
Story1	W50	60	Wall	60	473	Live	LinStatic	-24.03	36.52	-32.96	51
Story1	W50	60	Wall	60	225	EQX	LinStatic	-705.71	-4642.81	1073.97	-431.8
Story1	W50	60	Wall	60	478	EQX	LinStatic	1409.74	5934.43	1925.2	6642.71
Story1	W50	60	Wall	60	206	EQX	LinStatic	4412.22	6534.93	1565.52	7364.96
Story1	W50	60	Wall	60	473	EQX	LinStatic	2296.77	-4042.32	714.29	2376.26
Story1	W50	60	Wall	60	225	EQY	LinStatic	-13.22	-86.96	20.11	-8.09
Story1	W50	60	Wall	60	478	EQY	LinStatic	26.4	111.15	36.06	124.41
Story1	W50	60	Wall	60	206	EQY	LinStatic	82.64	122.39	29.32	137.94
Story1	W50	60	Wall	60	473	EQY	LinStatic	43.02	-75.71	13.38	44.51
Story1	W50	60	Wall	60	225	Dead	Combination	453.49	1168.9	-384.63	1336.45
Story1	W50	60	Wall	60	478	Dead	Combination	-350.17	-2849.4	128.04	-343.62
Story1	W50	60	Wall	60	206	Dead	Combination	-1441.04	-3067.58	-440.52	-1329.4
Story1	W50	60	Wall	60	473	Dead	Combination	-637.38	950.73	-953.19	1397.27
Story1	W51	61	Wall	61	224	Self Weight	LinStatic	-4900.5	-6888.92	-4563.33	-1224.33
Story1	W51	61	Wall	61	225	Self Weight	LinStatic	-3450.25	362.33	-4537.55	3377.76
Story1	W51	61	Wall	61	473	Self Weight	LinStatic	-47.54	1042.87	-1553.08	2143.66
Story1	W51	61	Wall	61	475	Self Weight	LinStatic	-1497.79	-6208.38	-1578.86	-1017.56
Story1	W51	61	Wall	61	224	Super Dead	LinStatic	-107.72	-149.95	-101.07	-25.58
Story1	W51	61	Wall	61	225	Super Dead	LinStatic	-75.59	10.71	-100.61	77.03
Story1	W51	61	Wall	61	473	Super Dead	LinStatic	-1.41	25.54	-33.98	48.62



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W51	61	Wall	61	475	Super Dead	LinStatic	-33.54	-135.11	-34.45	-22.96
Story1	W51	61	Wall	61	224	Live	LinStatic	-174.83	-243.68	-163.87	-41.81
Story1	W51	61	Wall	61	225	Live	LinStatic	-122.74	16.78	-163.1	124.41
Story1	W51	61	Wall	61	473	Live	LinStatic	-2.21	40.88	-55.18	78.58
Story1	W51	61	Wall	61	475	Live	LinStatic	-54.3	-219.58	-55.96	-37.14
Story1	W51	61	Wall	61	224	EQX	LinStatic	5264.98	5540.37	5857.67	11261.97
Story1	W51	61	Wall	61	225	EQX	LinStatic	3392.27	-3823.22	5957.29	6749.09
Story1	W51	61	Wall	61	473	EQX	LinStatic	510.3	-4399.61	1468.81	916.16
Story1	W51	61	Wall	61	475	EQX	LinStatic	2383.02	4963.98	1369.2	5555
Story1	W51	61	Wall	61	224	EQY	LinStatic	98.61	103.77	109.71	210.93
Story1	W51	61	Wall	61	225	EQY	LinStatic	63.53	-71.61	111.58	126.4
Story1	W51	61	Wall	61	473	EQY	LinStatic	9.56	-82.4	27.51	17.16
Story1	W51	61	Wall	61	475	EQY	LinStatic	44.63	92.97	25.64	104.04
Story1	W51	61	Wall	61	224	Dead	Combination	-5008.22	-7038.87	-4664.4	-1249.91
Story1	W51	61	Wall	61	225	Dead	Combination	-3525.84	373.04	-4638.16	3454.79
Story1	W51	61	Wall	61	473	Dead	Combination	-48.95	1068.41	-1587.06	2192.26
Story1	W51	61	Wall	61	475	Dead	Combination	-1531.33	-6343.49	-1613.3	-1040.52
Story1	W53	62	Wall	62	479	Self Weight	LinStatic	-871.99	-4783.99	-849.88	-695.33
Story1	W53	62	Wall	62	224	Self Weight	LinStatic	-1142.66	-6137.35	-829.36	-1008.55
Story1	W53	62	Wall	62	475	Self Weight	LinStatic	-1142.91	-6137.4	-387.33	-1113.05
Story1	W53	62	Wall	62	477	Self Weight	LinStatic	-872.24	-4784.04	-407.86	-830.16
Story1	W53	62	Wall	62	479	Super Dead	LinStatic	-19.36	-101.39	-17.96	-15.6
Story1	W53	62	Wall	62	224	Super Dead	LinStatic	-25.79	-133.56	-17.91	-22.89
Story1	W53	62	Wall	62	475	Super Dead	LinStatic	-25.48	-133.5	-8.42	-24.83
Story1	W53	62	Wall	62	477	Super Dead	LinStatic	-19.04	-101.33	-8.47	-18.18
Story1	W53	62	Wall	62	479	Live	LinStatic	-31.38	-165.38	-29.31	-25.25
Story1	W53	62	Wall	62	224	Live	LinStatic	-41.71	-217.06	-29.14	-37
Story1	W53	62	Wall	62	475	Live	LinStatic	-41.27	-216.97	-13.68	-40.21
Story1	W53	62	Wall	62	477	Live	LinStatic	-30.94	-165.29	-13.85	-29.52
Story1	W53	62	Wall	62	479	EQX	LinStatic	1177.26	417.06	13.74	1177.51
Story1	W53	62	Wall	62	224	EQX	LinStatic	2074.29	4902.23	494.35	4986.16
Story1	W53	62	Wall	62	475	EQX	LinStatic	1672.97	4821.97	293.95	4849.17
Story1	W53	62	Wall	62	477	EQX	LinStatic	775.93	336.8	-186.66	844.55
Story1	W53	62	Wall	62	479	EQY	LinStatic	22.05	7.81	0.26	22.05
Story1	W53	62	Wall	62	224	EQY	LinStatic	38.85	91.81	9.26	93.39
Story1	W53	62	Wall	62	475	EQY	LinStatic	31.33	90.31	5.51	90.82
Story1	W53	62	Wall	62	477	EQY	LinStatic	14.53	6.31	-3.5	15.82
Story1	W53	62	Wall	62	479	Dead	Combination	-891.35	-4885.38	-867.85	-710.93
Story1	W53	62	Wall	62	224	Dead	Combination	-1168.45	-6270.91	-847.27	-1031.44
Story1	W53	62	Wall	62	475	Dead	Combination	-1168.39	-6270.9	-395.75	-1137.88
Story1	W53	62	Wall	62	477	Dead	Combination	-891.28	-4885.37	-416.33	-848.35
Story1	W54	63	Wall	63	226	Self Weight	LinStatic	677.76	1325.58	-287.21	1434.57
Story1	W54	63	Wall	63	208	Self Weight	LinStatic	-70.7	-2416.71	-66.21	-68.83
Story1	W54	63	Wall	63	478	Self Weight	LinStatic	-276.22	-2457.81	-308.11	-233.54
Story1	W54	63	Wall	63	225	Self Weight	LinStatic	472.24	1284.48	-529.11	1545.35

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W54	63	Wall	63	226	Super Dead	LinStatic	16.14	31.08	-7.41	34.13
Story1	W54	63	Wall	63	208	Super Dead	LinStatic	-0.8	-53.63	-1.92	-0.73
Story1	W54	63	Wall	63	478	Super Dead	LinStatic	-6.59	-54.79	-7.29	-5.51
Story1	W54	63	Wall	63	225	Super Dead	LinStatic	10.36	29.92	-12.79	36.24
Story1	W54	63	Wall	63	226	Live	LinStatic	25.93	50.02	-11.79	54.83
Story1	W54	63	Wall	63	208	Live	LinStatic	-1.46	-86.93	-3.01	-1.35
Story1	W54	63	Wall	63	478	Live	LinStatic	-10.58	-88.75	-11.72	-8.86
Story1	W54	63	Wall	63	225	Live	LinStatic	16.81	48.19	-20.5	58.31
Story1	W54	63	Wall	63	226	EQX	LinStatic	-2289.71	-3854.29	1686.06	-1213.3
Story1	W54	63	Wall	63	208	EQX	LinStatic	-873.33	3227.59	651.8	3328.69
Story1	W54	63	Wall	63	478	EQX	LinStatic	940.94	3590.44	980.47	3913.81
Story1	W54	63	Wall	63	225	EQX	LinStatic	-475.43	-3491.44	2014.73	533.16
Story1	W54	63	Wall	63	226	EQY	LinStatic	-42.88	-72.19	31.58	-22.72
Story1	W54	63	Wall	63	208	EQY	LinStatic	-16.36	60.45	12.21	62.34
Story1	W54	63	Wall	63	478	EQY	LinStatic	17.62	67.25	18.36	73.3
Story1	W54	63	Wall	63	225	EQY	LinStatic	-8.9	-65.39	37.73	9.99
Story1	W54	63	Wall	63	226	Dead	Combination	693.9	1356.66	-294.62	1468.69
Story1	W54	63	Wall	63	208	Dead	Combination	-71.5	-2470.33	-68.13	-69.56
Story1	W54	63	Wall	63	478	Dead	Combination	-282.81	-2512.6	-315.4	-239.05
Story1	W54	63	Wall	63	225	Dead	Combination	482.59	1314.4	-541.89	1581.59
Story1	W55	64	Wall	64	198	Self Weight	LinStatic	-1049.71	-11435.88	-1631.05	-799.59
Story1	W55	64	Wall	64	227	Self Weight	LinStatic	204.86	-5163.03	-3489.32	1923.06
Story1	W55	64	Wall	64	224	Self Weight	LinStatic	-995.82	-5403.17	-2814	374.69
Story1	W55	64	Wall	64	479	Self Weight	LinStatic	-2250.39	-11676.02	-955.74	-2154.46
Story1	W55	64	Wall	64	198	Super Dead	LinStatic	-22.1	-245.28	-35.38	-16.62
Story1	W55	64	Wall	64	227	Super Dead	LinStatic	4.32	-113.16	-76.04	41.67
Story1	W55	64	Wall	64	224	Super Dead	LinStatic	-22.8	-118.58	-61.34	7.13
Story1	W55	64	Wall	64	479	Super Dead	LinStatic	-49.22	-250.7	-20.69	-47.12
Story1	W55	64	Wall	64	198	Live	LinStatic	-36.08	-399.41	-57.53	-27.19
Story1	W55	64	Wall	64	227	Live	LinStatic	7.06	-183.72	-123.55	67.76
Story1	W55	64	Wall	64	224	Live	LinStatic	-36.8	-192.5	-99.67	11.82
Story1	W55	64	Wall	64	479	Live	LinStatic	-79.94	-408.18	-33.65	-76.52
Story1	W55	64	Wall	64	198	EQX	LinStatic	-93.89	4632.31	1164.85	4903.8
Story1	W55	64	Wall	64	227	EQX	LinStatic	4.83	5125.91	2917.9	6447.44
Story1	W55	64	Wall	64	224	EQX	LinStatic	2207.12	5566.36	2379.85	6799.61
Story1	W55	64	Wall	64	479	EQX	LinStatic	2108.4	5072.76	626.8	5199.85
Story1	W55	64	Wall	64	198	EQY	LinStatic	-1.76	86.76	21.82	91.84
Story1	W55	64	Wall	64	227	EQY	LinStatic	0.09	96	54.65	120.76
Story1	W55	64	Wall	64	224	EQY	LinStatic	41.34	104.25	44.57	127.35
Story1	W55	64	Wall	64	479	EQY	LinStatic	39.49	95.01	11.74	97.39
Story1	W55	64	Wall	64	198	Dead	Combination	-1071.81	-11681.16	-1666.44	-816.21
Story1	W55	64	Wall	64	227	Dead	Combination	209.19	-5276.19	-3565.36	1964.73
Story1	W55	64	Wall	64	224	Dead	Combination	-1018.62	-5521.75	-2875.35	381.82
Story1	W55	64	Wall	64	479	Dead	Combination	-2299.62	-11926.72	-976.43	-2201.58
Story1	W57	65	Wall	65	210	Self Weight	LinStatic	-142.6	-1754.46	1456.56	716.13

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W57	65	Wall	65	480	Self Weight	LinStatic	-393.51	-3008.99	1641.28	397.32
Story1	W57	65	Wall	65	204	Self Weight	LinStatic	-610.48	-3052.38	1123.55	-172.19
Story1	W57	65	Wall	65	481	Self Weight	LinStatic	-359.57	-1797.85	938.83	103.9
Story1	W57	65	Wall	65	210	Super Dead	LinStatic	-1.79	-35.97	30.14	15.77
Story1	W57	65	Wall	65	480	Super Dead	LinStatic	-7.35	-63.79	34.02	8.63
Story1	W57	65	Wall	65	204	Super Dead	LinStatic	-12.98	-64.92	23.78	-3.74
Story1	W57	65	Wall	65	481	Super Dead	LinStatic	-7.42	-37.1	19.9	2.57
Story1	W57	65	Wall	65	210	Live	LinStatic	-3.2	-58.95	49.33	25.59
Story1	W57	65	Wall	65	480	Live	LinStatic	-12.22	-104.05	55.67	14.03
Story1	W57	65	Wall	65	204	Live	LinStatic	-21.17	-105.84	38.8	-6.08
Story1	W57	65	Wall	65	481	Live	LinStatic	-12.15	-60.74	32.46	4.1
Story1	W57	65	Wall	65	210	EQX	LinStatic	-1533.09	-1363.14	782.43	-661.09
Story1	W57	65	Wall	65	480	EQX	LinStatic	-1203.05	287.07	810.79	643.14
Story1	W57	65	Wall	65	204	EQX	LinStatic	109.93	549.67	-60.27	557.78
Story1	W57	65	Wall	65	481	EQX	LinStatic	-220.11	-1100.54	-88.64	-211.27
Story1	W57	65	Wall	65	210	EQY	LinStatic	-28.71	-25.53	14.65	-12.38
Story1	W57	65	Wall	65	480	EQY	LinStatic	-22.53	5.38	15.19	12.05
Story1	W57	65	Wall	65	204	EQY	LinStatic	2.06	10.29	-1.13	10.45
Story1	W57	65	Wall	65	481	EQY	LinStatic	-4.12	-20.61	-1.66	-3.96
Story1	W57	65	Wall	65	210	Dead	Combination	-144.39	-1790.43	1486.7	731.9
Story1	W57	65	Wall	65	480	Dead	Combination	-400.86	-3072.78	1675.3	405.94
Story1	W57	65	Wall	65	204	Dead	Combination	-623.46	-3117.3	1147.33	-175.93
Story1	W57	65	Wall	65	481	Dead	Combination	-366.99	-1834.95	958.73	106.46
Story1	W58	66	Wall	66	209	Self Weight	LinStatic	-1128.24	-750.58	1839.79	910.05
Story1	W58	66	Wall	66	210	Self Weight	LinStatic	-1378.45	-2001.63	1524.71	-133.81
Story1	W58	66	Wall	66	481	Self Weight	LinStatic	-359.57	-1797.85	960.74	121.37
Story1	W58	66	Wall	66	205	Self Weight	LinStatic	-109.36	-546.8	1275.82	966.35
Story1	W58	66	Wall	66	209	Super Dead	LinStatic	-19.91	-15.54	35.87	18.21
Story1	W58	66	Wall	66	210	Super Dead	LinStatic	-24.92	-40.6	30.37	-1.4
Story1	W58	66	Wall	66	481	Super Dead	LinStatic	-7.42	-37.1	19.54	2.27
Story1	W58	66	Wall	66	205	Super Dead	LinStatic	-2.41	-12.04	25.04	18.27
Story1	W58	66	Wall	66	209	Live	LinStatic	-33.38	-25.43	59.21	29.94
Story1	W58	66	Wall	66	210	Live	LinStatic	-41.62	-66.64	49.97	-2.61
Story1	W58	66	Wall	66	481	Live	LinStatic	-12.15	-60.74	32.05	3.78
Story1	W58	66	Wall	66	205	Live	LinStatic	-3.91	-19.54	41.29	30.3
Story1	W58	66	Wall	66	209	EQX	LinStatic	-4920.19	-396.4	3757.64	1727.6
Story1	W58	66	Wall	66	210	EQX	LinStatic	-5262.72	-2109.07	2309.76	-889.23
Story1	W58	66	Wall	66	481	EQX	LinStatic	-220.11	-1100.54	950.65	387.3
Story1	W58	66	Wall	66	205	EQX	LinStatic	122.43	612.13	2398.54	2778.28
Story1	W58	66	Wall	66	209	EQY	LinStatic	-92.15	-7.42	70.38	32.36
Story1	W58	66	Wall	66	210	EQY	LinStatic	-98.57	-39.5	43.26	-16.65
Story1	W58	66	Wall	66	481	EQY	LinStatic	-4.12	-20.61	17.8	7.25
Story1	W58	66	Wall	66	205	EQY	LinStatic	2.29	11.46	44.92	52.03
Story1	W58	66	Wall	66	209	Dead	Combination	-1148.15	-766.12	1875.66	928.23
Story1	W58	66	Wall	66	210	Dead	Combination	-1403.37	-2042.23	1555.08	-135.25

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W58	66	Wall	66	481	Dead	Combination	-366.99	-1834.95	980.28	123.64
Story1	W58	66	Wall	66	205	Dead	Combination	-111.77	-558.84	1300.86	984.62
Story1	W59	67	Wall	67	211	Self Weight	LinStatic	-658.15	835.51	2516.91	2714.06
Story1	W59	67	Wall	67	203	Self Weight	LinStatic	-2306.94	-7408.43	1425.79	-1935.49
Story1	W59	67	Wall	67	480	Self Weight	LinStatic	-1230.33	-7193.11	865.36	-1107.29
Story1	W59	67	Wall	67	210	Self Weight	LinStatic	418.45	1050.83	1956.49	2716.51
Story1	W59	67	Wall	67	211	Super Dead	LinStatic	-13.18	18.08	50.96	55.76
Story1	W59	67	Wall	67	203	Super Dead	LinStatic	-47.78	-154.9	28.58	-40.63
Story1	W59	67	Wall	67	480	Super Dead	LinStatic	-24.65	-150.27	17.55	-22.24
Story1	W59	67	Wall	67	210	Super Dead	LinStatic	9.95	22.71	39.93	56.76
Story1	W59	67	Wall	67	211	Live	LinStatic	-21.67	29.41	83.67	91.34
Story1	W59	67	Wall	67	203	Live	LinStatic	-78.18	-253.13	46.99	-66.36
Story1	W59	67	Wall	67	480	Live	LinStatic	-40.53	-245.6	28.8	-36.56
Story1	W59	67	Wall	67	210	Live	LinStatic	15.98	36.94	65.48	92.77
Story1	W59	67	Wall	67	211	EQX	LinStatic	-905.86	-541.45	2763.63	2045.97
Story1	W59	67	Wall	67	203	EQX	LinStatic	-1199.09	-2007.65	1925.98	364.59
Story1	W59	67	Wall	67	480	EQX	LinStatic	-1681.28	-2104.08	918.1	-950.55
Story1	W59	67	Wall	67	210	EQX	LinStatic	-1388.04	-637.89	1755.75	782.4
Story1	W59	67	Wall	67	211	EQY	LinStatic	-16.97	-10.14	51.76	38.32
Story1	W59	67	Wall	67	203	EQY	LinStatic	-22.46	-37.6	36.07	6.83
Story1	W59	67	Wall	67	480	EQY	LinStatic	-31.49	-39.41	17.2	-17.8
Story1	W59	67	Wall	67	210	EQY	LinStatic	-26	-11.95	32.88	14.65
Story1	W59	67	Wall	67	211	Dead	Combination	-671.33	853.59	2567.88	2769.82
Story1	W59	67	Wall	67	203	Dead	Combination	-2354.71	-7563.32	1454.37	-1976.13
Story1	W59	67	Wall	67	480	Dead	Combination	-1254.98	-7343.38	882.91	-1129.53
Story1	W59	67	Wall	67	210	Dead	Combination	428.4	1073.54	1996.41	2773.28
Story1	W61	68	Wall	68	411	Self Weight	LinStatic	246.26	-1970.87	-725.56	462.6
Story1	W61	68	Wall	68	412	Self Weight	LinStatic	578.05	-311.93	-730.6	988.5
Story1	W61	68	Wall	68	400	Self Weight	LinStatic	-89.07	-445.36	-495.09	258.95
Story1	W61	68	Wall	68	482	Self Weight	LinStatic	-420.86	-2104.29	-490.06	-288.59
Story1	W61	68	Wall	68	411	Super Dead	LinStatic	26.47	-237.18	-91.15	54.92
Story1	W61	68	Wall	68	412	Super Dead	LinStatic	66.72	-35.94	-96.01	124.26
Story1	W61	68	Wall	68	400	Super Dead	LinStatic	-10.27	-51.34	-65.72	38.05
Story1	W61	68	Wall	68	482	Super Dead	LinStatic	-50.52	-252.58	-60.87	-33.6
Story1	W61	68	Wall	68	411	Live	LinStatic	38.36	-342.58	-131.51	79.35
Story1	W61	68	Wall	68	412	Live	LinStatic	96.48	-51.98	-138.35	179.25
Story1	W61	68	Wall	68	400	Live	LinStatic	-14.85	-74.25	-94.68	54.68
Story1	W61	68	Wall	68	482	Live	LinStatic	-72.97	-364.84	-87.84	-48.57
Story1	W61	68	Wall	68	411	EQX	LinStatic	159.97	135.12	156.26	304.3
Story1	W61	68	Wall	68	412	EQX	LinStatic	136.38	17.2	272.28	355.52
Story1	W61	68	Wall	68	400	EQX	LinStatic	-2.1	-10.49	201.11	194.86
Story1	W61	68	Wall	68	482	EQX	LinStatic	21.48	107.42	85.09	159.78
Story1	W61	68	Wall	68	411	EQY	LinStatic	1017.82	929.25	1090.73	2065.16
Story1	W61	68	Wall	68	412	EQY	LinStatic	845.55	67.89	1908.88	2404.79
Story1	W61	68	Wall	68	400	EQY	LinStatic	-21.09	-105.44	1412.4	1349.76

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W61	68	Wall	68	482	EQY	LinStatic	151.18	755.92	594.25	1120.3
Story1	W61	68	Wall	68	411	Dead	Combination	272.73	-2208.05	-816.72	517.47
Story1	W61	68	Wall	68	412	Dead	Combination	644.77	-347.88	-826.6	1112.61
Story1	W61	68	Wall	68	400	Dead	Combination	-99.34	-496.7	-560.81	296.95
Story1	W61	68	Wall	68	482	Dead	Combination	-471.37	-2356.87	-550.93	-322.2
Story1	W62	69	Wall	69	483	Self Weight	LinStatic	-1189.07	-2048.09	-572.31	-903.03
Story1	W62	69	Wall	69	411	Self Weight	LinStatic	-1232.79	-2266.68	-686.55	-890.32
Story1	W62	69	Wall	69	482	Self Weight	LinStatic	-420.86	-2104.29	-764.85	-125.26
Story1	W62	69	Wall	69	484	Self Weight	LinStatic	-377.14	-1885.7	-650.6	-135.32
Story1	W62	69	Wall	69	483	Super Dead	LinStatic	-146.68	-241.94	-68.96	-110.5
Story1	W62	69	Wall	69	411	Super Dead	LinStatic	-152.91	-273.06	-82.89	-110.61
Story1	W62	69	Wall	69	482	Super Dead	LinStatic	-50.52	-252.58	-92.65	-14.46
Story1	W62	69	Wall	69	484	Super Dead	LinStatic	-44.29	-221.46	-78.73	-14.36
Story1	W62	69	Wall	69	483	Live	LinStatic	-211.72	-349.62	-99.61	-159.53
Story1	W62	69	Wall	69	411	Live	LinStatic	-220.67	-394.38	-119.71	-159.62
Story1	W62	69	Wall	69	482	Live	LinStatic	-72.97	-364.84	-133.8	-20.91
Story1	W62	69	Wall	69	484	Live	LinStatic	-64.02	-320.08	-113.69	-20.82
Story1	W62	69	Wall	69	483	EQX	LinStatic	215.53	-6.13	31.12	219.81
Story1	W62	69	Wall	69	411	EQX	LinStatic	247.27	152.58	41.43	262.84
Story1	W62	69	Wall	69	482	EQX	LinStatic	21.48	107.42	55.27	134.46
Story1	W62	69	Wall	69	484	EQX	LinStatic	-10.26	-51.29	44.96	18.65
Story1	W62	69	Wall	69	483	EQY	LinStatic	1460.12	-39.29	225.76	1493.38
Story1	W62	69	Wall	69	411	EQY	LinStatic	1680.33	1061.75	300.01	1801.93
Story1	W62	69	Wall	69	482	EQY	LinStatic	151.18	755.92	397.75	953.18
Story1	W62	69	Wall	69	484	EQY	LinStatic	-69.02	-345.12	323.49	144.64
Story1	W62	69	Wall	69	483	Dead	Combination	-1335.76	-2290.03	-641.27	-1013.59
Story1	W62	69	Wall	69	411	Dead	Combination	-1385.7	-2539.73	-769.44	-1000.95
Story1	W62	69	Wall	69	482	Dead	Combination	-471.37	-2356.87	-857.51	-139.72
Story1	W62	69	Wall	69	484	Dead	Combination	-421.43	-2107.16	-729.33	-149.69
Story1	W63	70	Wall	70	485	Self Weight	LinStatic	-952.14	-2462.69	-1034.93	-426.2
Story1	W63	70	Wall	70	483	Self Weight	LinStatic	-855.89	-1981.45	-955.3	-309.93
Story1	W63	70	Wall	70	484	Self Weight	LinStatic	-377.14	-1885.7	-312.99	-314.78
Story1	W63	70	Wall	70	486	Self Weight	LinStatic	-473.39	-2366.94	-392.62	-395.21
Story1	W63	70	Wall	70	485	Super Dead	LinStatic	-115.43	-293.04	-126.04	-50.06
Story1	W63	70	Wall	70	483	Super Dead	LinStatic	-103.49	-233.3	-116.52	-35.02
Story1	W63	70	Wall	70	484	Super Dead	LinStatic	-44.29	-221.46	-37.82	-36.56
Story1	W63	70	Wall	70	486	Super Dead	LinStatic	-56.24	-281.2	-47.34	-46.68
Story1	W63	70	Wall	70	485	Live	LinStatic	-166.69	-423.39	-181.98	-72.35
Story1	W63	70	Wall	70	483	Live	LinStatic	-149.45	-337.17	-168.23	-50.67
Story1	W63	70	Wall	70	484	Live	LinStatic	-64.02	-320.08	-54.62	-52.85
Story1	W63	70	Wall	70	486	Live	LinStatic	-81.26	-406.3	-68.38	-67.46
Story1	W63	70	Wall	70	485	EQX	LinStatic	96.65	57.55	108.28	187.14
Story1	W63	70	Wall	70	483	EQX	LinStatic	78.44	-33.55	104.01	140.57
Story1	W63	70	Wall	70	484	EQX	LinStatic	-10.26	-51.29	20.86	-1.51
Story1	W63	70	Wall	70	486	EQX	LinStatic	7.96	39.81	25.13	53.64

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W63	70	Wall	70	485	EQY	LinStatic	659.89	401.82	755.19	1296.99
Story1	W63	70	Wall	70	483	EQY	LinStatic	534.64	-224.39	726.66	974.92
Story1	W63	70	Wall	70	484	EQY	LinStatic	-69.02	-345.12	149.36	-3.69
Story1	W63	70	Wall	70	486	EQY	LinStatic	56.22	281.09	177.9	379.1
Story1	W63	70	Wall	70	485	Dead	Combination	-1067.58	-2755.73	-1160.97	-476.27
Story1	W63	70	Wall	70	483	Dead	Combination	-959.38	-2214.75	-1071.81	-344.98
Story1	W63	70	Wall	70	484	Dead	Combination	-421.43	-2107.16	-350.81	-351.34
Story1	W63	70	Wall	70	486	Dead	Combination	-529.63	-2648.14	-439.96	-441.89
Story1	W64	71	Wall	71	487	Self Weight	LinStatic	-1073.57	-2450.2	-121.52	-1062.93
Story1	W64	71	Wall	71	485	Self Weight	LinStatic	-1081.23	-2488.51	-295.38	-1021.75
Story1	W64	71	Wall	71	486	Self Weight	LinStatic	-473.39	-2366.94	-382.72	-398.96
Story1	W64	71	Wall	71	401	Self Weight	LinStatic	-465.73	-2328.63	-208.86	-442.6
Story1	W64	71	Wall	71	487	Super Dead	LinStatic	-127.76	-289.79	-14.14	-126.53
Story1	W64	71	Wall	71	485	Super Dead	LinStatic	-128.95	-295.74	-35.7	-121.63
Story1	W64	71	Wall	71	486	Super Dead	LinStatic	-56.24	-281.2	-46.42	-47.04
Story1	W64	71	Wall	71	401	Super Dead	LinStatic	-55.05	-275.25	-24.86	-52.28
Story1	W64	71	Wall	71	487	Live	LinStatic	-184.59	-418.77	-20.45	-182.81
Story1	W64	71	Wall	71	485	Live	LinStatic	-186.29	-427.31	-51.55	-175.73
Story1	W64	71	Wall	71	486	Live	LinStatic	-81.26	-406.3	-67.03	-67.98
Story1	W64	71	Wall	71	401	Live	LinStatic	-79.55	-397.76	-35.92	-75.55
Story1	W64	71	Wall	71	487	EQX	LinStatic	31.64	2.78	-9.81	34.66
Story1	W64	71	Wall	71	485	EQX	LinStatic	40.34	46.29	20.34	63.88
Story1	W64	71	Wall	71	486	EQX	LinStatic	7.96	39.81	33.67	61.14
Story1	W64	71	Wall	71	401	EQX	LinStatic	-0.74	-3.7	3.52	1.6
Story1	W64	71	Wall	71	487	EQY	LinStatic	213.67	23.8	-64.37	233.44
Story1	W64	71	Wall	71	485	EQY	LinStatic	273.83	324.61	144.85	446.28
Story1	W64	71	Wall	71	486	EQY	LinStatic	56.22	281.09	235.82	429.9
Story1	W64	71	Wall	71	401	EQY	LinStatic	-3.94	-19.72	26.59	15.9
Story1	W64	71	Wall	71	487	Dead	Combination	-1201.33	-2740	-135.66	-1189.46
Story1	W64	71	Wall	71	485	Dead	Combination	-1210.18	-2784.25	-331.07	-1143.38
Story1	W64	71	Wall	71	486	Dead	Combination	-529.63	-2648.14	-429.14	-446
Story1	W64	71	Wall	71	401	Dead	Combination	-520.78	-2603.89	-233.73	-494.88
Story1	W65	72	Wall	72	420	Self Weight	LinStatic	916.68	417.18	-592.34	1309.76
Story1	W65	72	Wall	72	488	Self Weight	LinStatic	-237	-5351.18	606.85	-165.97
Story1	W65	72	Wall	72	411	Self Weight	LinStatic	-1916.89	-5687.16	517.88	-1847.05
Story1	W65	72	Wall	72	483	Self Weight	LinStatic	-763.22	81.2	-681.31	460.51
Story1	W65	72	Wall	72	420	Super Dead	LinStatic	111.3	61.66	-73.1	163.67
Story1	W65	72	Wall	72	488	Super Dead	LinStatic	-31.39	-651.75	67.42	-24.15
Story1	W65	72	Wall	72	411	Super Dead	LinStatic	-236.87	-692.85	58.78	-229.41
Story1	W65	72	Wall	72	483	Super Dead	LinStatic	-94.18	20.57	-81.73	63.05
Story1	W65	72	Wall	72	420	Live	LinStatic	160.71	88.61	-105.5	236.15
Story1	W65	72	Wall	72	488	Live	LinStatic	-45.22	-941.05	97.6	-34.71
Story1	W65	72	Wall	72	411	Live	LinStatic	-341.87	-1000.38	85.04	-331.07
Story1	W65	72	Wall	72	483	Live	LinStatic	-135.94	29.28	-118.06	90.76
Story1	W65	72	Wall	72	420	EQX	LinStatic	-86.96	-397.74	96.02	-59.69



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W65	72	Wall	72	488	EQX	LinStatic	111.6	595.04	151.1	638.38
Story1	W65	72	Wall	72	411	EQX	LinStatic	345.1	641.74	84.77	664.26
Story1	W65	72	Wall	72	483	EQX	LinStatic	146.55	-351.04	29.69	148.31
Story1	W65	72	Wall	72	420	EQY	LinStatic	-605.36	-2728.49	662.39	-415.66
Story1	W65	72	Wall	72	488	EQY	LinStatic	762.52	4110.95	1023.12	4398.82
Story1	W65	72	Wall	72	411	EQY	LinStatic	2353.82	4429.21	574.35	4577.55
Story1	W65	72	Wall	72	483	EQY	LinStatic	985.94	-2410.23	213.61	999.32
Story1	W65	72	Wall	72	420	Dead	Combination	1027.97	478.84	-665.43	1473.26
Story1	W65	72	Wall	72	488	Dead	Combination	-268.38	-6002.93	674.26	-190.17
Story1	W65	72	Wall	72	411	Dead	Combination	-2153.75	-6380.01	576.66	-2076.48
Story1	W65	72	Wall	72	483	Dead	Combination	-857.4	101.77	-763.04	523.42
Story1	W66	73	Wall	73	419	Self Weight	LinStatic	-4983.47	-4677.81	-1332.99	-3488.92
Story1	W66	73	Wall	73	420	Self Weight	LinStatic	-4167.86	-599.73	-1530.84	-32.97
Story1	W66	73	Wall	73	483	Self Weight	LinStatic	-430.04	147.84	-1064.3	961.72
Story1	W66	73	Wall	73	485	Self Weight	LinStatic	-1245.65	-3930.25	-866.44	-990.3
Story1	W66	73	Wall	73	419	Super Dead	LinStatic	-599.95	-566.35	-170.97	-411.36
Story1	W66	73	Wall	73	420	Super Dead	LinStatic	-498.75	-60.35	-194.86	13.75
Story1	W66	73	Wall	73	483	Super Dead	LinStatic	-50.98	29.21	-129.29	124.47
Story1	W66	73	Wall	73	485	Super Dead	LinStatic	-152.19	-476.79	-105.39	-120.97
Story1	W66	73	Wall	73	419	Live	LinStatic	-866.53	-817.87	-246.51	-594.49
Story1	W66	73	Wall	73	420	Live	LinStatic	-720.48	-87.63	-281.03	19.15
Story1	W66	73	Wall	73	483	Live	LinStatic	-73.67	41.73	-186.69	179.43
Story1	W66	73	Wall	73	485	Live	LinStatic	-219.72	-688.51	-152.17	-174.66
Story1	W66	73	Wall	73	419	EQX	LinStatic	348.73	412.76	418.81	800.78
Story1	W66	73	Wall	73	420	EQX	LinStatic	198.03	-340.75	432.91	438.52
Story1	W66	73	Wall	73	483	EQX	LinStatic	9.45	-378.46	102.58	34.91
Story1	W66	73	Wall	73	485	EQX	LinStatic	160.15	375.05	88.49	406.79
Story1	W66	73	Wall	73	419	EQY	LinStatic	2397.72	2854.95	2887.1	5522.47
Story1	W66	73	Wall	73	420	EQY	LinStatic	1359.63	-2335.49	2986.45	3023.82
Story1	W66	73	Wall	73	483	EQY	LinStatic	60.46	-2595.32	714.51	240.49
Story1	W66	73	Wall	73	485	EQY	LinStatic	1098.54	2595.11	615.17	2815.52
Story1	W66	73	Wall	73	419	Dead	Combination	-5583.42	-5244.16	-1503.95	-3900.3
Story1	W66	73	Wall	73	420	Dead	Combination	-4666.61	-660.07	-1725.71	-19.26
Story1	W66	73	Wall	73	483	Dead	Combination	-481.02	177.04	-1193.58	1086.11
Story1	W66	73	Wall	73	485	Dead	Combination	-1397.84	-4407.04	-971.83	-1111.27
Story1	W67	74	Wall	74	489	Self Weight	LinStatic	-785.28	-2801.96	-520.28	-658.97
Story1	W67	74	Wall	74	419	Self Weight	LinStatic	-1001.16	-3881.35	-709.31	-835.96
Story1	W67	74	Wall	74	485	Self Weight	LinStatic	-1374.75	-3956.07	-126.89	-1368.52
Story1	W67	74	Wall	74	487	Self Weight	LinStatic	-1158.87	-2876.68	62.13	-1156.62
Story1	W67	74	Wall	74	489	Super Dead	LinStatic	-94.41	-329.11	-61.42	-79.31
Story1	W67	74	Wall	74	419	Super Dead	LinStatic	-122.77	-470.91	-84.89	-103.17
Story1	W67	74	Wall	74	485	Super Dead	LinStatic	-165.7	-479.5	-15.04	-164.98
Story1	W67	74	Wall	74	487	Super Dead	LinStatic	-137.34	-337.69	8.43	-136.98
Story1	W67	74	Wall	74	489	Live	LinStatic	-136.37	-475.67	-88.76	-114.55
Story1	W67	74	Wall	74	419	Live	LinStatic	-177.23	-680.01	-122.63	-148.92

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W67	74	Wall	74	485	Live	LinStatic	-239.32	-692.43	-21.74	-238.28
Story1	W67	74	Wall	74	487	Live	LinStatic	-198.45	-488.09	12.14	-197.94
Story1	W67	74	Wall	74	489	EQX	LinStatic	52.12	-78.56	-6.67	52.46
Story1	W67	74	Wall	74	419	EQX	LinStatic	142.12	371.44	31.4	375.66
Story1	W67	74	Wall	74	485	EQX	LinStatic	103.84	363.79	0.55	363.79
Story1	W67	74	Wall	74	487	EQX	LinStatic	13.84	-86.21	-37.52	26.35
Story1	W67	74	Wall	74	489	EQY	LinStatic	357.04	-525.07	-41.03	358.94
Story1	W67	74	Wall	74	419	EQY	LinStatic	976.18	2570.64	218.47	2600.03
Story1	W67	74	Wall	74	485	EQY	LinStatic	712.49	2517.9	4.83	2517.92
Story1	W67	74	Wall	74	487	EQY	LinStatic	93.35	-577.8	-254.67	179.04
Story1	W67	74	Wall	74	489	Dead	Combination	-879.69	-3131.07	-581.7	-738.28
Story1	W67	74	Wall	74	419	Dead	Combination	-1123.93	-4352.26	-794.2	-939.13
Story1	W67	74	Wall	74	485	Dead	Combination	-1540.44	-4435.56	-141.94	-1533.5
Story1	W67	74	Wall	74	487	Dead	Combination	-1296.2	-3214.37	70.56	-1293.61
Story1	W68	75	Wall	75	421	Self Weight	LinStatic	153.67	834.7	1494.43	2026.92
Story1	W68	75	Wall	75	413	Self Weight	LinStatic	-1313.09	-6499.11	946.55	-1145.72
Story1	W68	75	Wall	75	488	Self Weight	LinStatic	-431.31	-6322.75	-648.08	-360.86
Story1	W68	75	Wall	75	420	Self Weight	LinStatic	1035.45	1011.06	-100.2	1124.19
Story1	W68	75	Wall	75	421	Super Dead	LinStatic	23.88	109.25	173.86	245.6
Story1	W68	75	Wall	75	413	Super Dead	LinStatic	-154.31	-781.73	110.73	-135.34
Story1	W68	75	Wall	75	488	Super Dead	LinStatic	-53.34	-761.53	-80.12	-44.39
Story1	W68	75	Wall	75	420	Super Dead	LinStatic	124.85	129.45	-16.98	144.28
Story1	W68	75	Wall	75	421	Live	LinStatic	34.28	157.45	251.36	354.66
Story1	W68	75	Wall	75	413	Live	LinStatic	-223.03	-1129.11	160.06	-195.59
Story1	W68	75	Wall	75	488	Live	LinStatic	-76.99	-1099.9	-115.63	-64.08
Story1	W68	75	Wall	75	420	Live	LinStatic	180.32	186.66	-24.33	208.02
Story1	W68	75	Wall	75	421	EQX	LinStatic	-184.99	-335.03	95.36	-138.67
Story1	W68	75	Wall	75	413	EQX	LinStatic	-36.65	406.66	37.14	409.75
Story1	W68	75	Wall	75	488	EQX	LinStatic	78.53	429.7	108.15	460.33
Story1	W68	75	Wall	75	420	EQX	LinStatic	-69.81	-311.99	166.37	14.87
Story1	W68	75	Wall	75	421	EQY	LinStatic	-1268.14	-2304.85	646.89	-957.54
Story1	W68	75	Wall	75	413	EQY	LinStatic	-242.31	2824.31	254.14	2845.23
Story1	W68	75	Wall	75	488	EQY	LinStatic	536.34	2980.04	747.48	3190.55
Story1	W68	75	Wall	75	420	EQY	LinStatic	-489.49	-2149.12	1140.24	90.92
Story1	W68	75	Wall	75	421	Dead	Combination	177.56	943.96	1668.3	2272.5
Story1	W68	75	Wall	75	413	Dead	Combination	-1467.4	-7280.84	1057.28	-1281.08
Story1	W68	75	Wall	75	488	Dead	Combination	-484.65	-7084.29	-728.19	-405.26
Story1	W68	75	Wall	75	420	Dead	Combination	1160.3	1140.5	-117.18	1268
Story1	W69	76	Wall	76	398	Self Weight	LinStatic	-597.07	-7313.36	-777.03	-508.35
Story1	W69	76	Wall	76	422	Self Weight	LinStatic	399.82	-2328.89	-1840.09	1326.19
Story1	W69	76	Wall	76	419	Self Weight	LinStatic	-736.11	-2556.08	-1720.23	300
Story1	W69	76	Wall	76	489	Self Weight	LinStatic	-1733	-7540.55	-657.17	-1659.57
Story1	W69	76	Wall	76	398	Super Dead	LinStatic	-70.2	-871.43	-94.47	-59.21
Story1	W69	76	Wall	76	422	Super Dead	LinStatic	46.6	-287.46	-223.44	158.54
Story1	W69	76	Wall	76	419	Super Dead	LinStatic	-91.61	-315.1	-208.36	33.08



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W69	76	Wall	76	489	Super Dead	LinStatic	-208.4	-899.07	-79.39	-199.39
Story1	W69	76	Wall	76	398	Live	LinStatic	-101.45	-1259	-136.41	-85.6
Story1	W69	76	Wall	76	422	Live	LinStatic	67.36	-414.91	-322.64	229.03
Story1	W69	76	Wall	76	419	Live	LinStatic	-132.2	-454.82	-300.89	47.9
Story1	W69	76	Wall	76	489	Live	LinStatic	-301.01	-1298.91	-114.66	-288.01
Story1	W69	76	Wall	76	398	EQX	LinStatic	-16.13	194.36	78.74	220.56
Story1	W69	76	Wall	76	422	EQX	LinStatic	19.8	374.01	181.6	450.57
Story1	W69	76	Wall	76	419	EQX	LinStatic	147.75	399.6	154.21	472.77
Story1	W69	76	Wall	76	489	EQX	LinStatic	111.82	219.95	51.35	240.45
Story1	W69	76	Wall	76	398	EQY	LinStatic	-106.1	1370.17	546.67	1550.56
Story1	W69	76	Wall	76	422	EQY	LinStatic	137.12	2586.26	1256.98	3116.56
Story1	W69	76	Wall	76	419	EQY	LinStatic	1014.39	2761.72	1067.03	3267.13
Story1	W69	76	Wall	76	489	EQY	LinStatic	771.17	1545.63	356.72	1684.89
Story1	W69	76	Wall	76	398	Dead	Combination	-667.27	-8184.79	-871.5	-567.56
Story1	W69	76	Wall	76	422	Dead	Combination	446.42	-2616.35	-2063.53	1484.72
Story1	W69	76	Wall	76	419	Dead	Combination	-827.72	-2871.18	-1928.59	333.07
Story1	W69	76	Wall	76	489	Dead	Combination	-1941.4	-8439.62	-736.56	-1858.96
Story1	W70	77	Wall	77	415	Self Weight	LinStatic	80.56	-2253.55	728.88	289.47
Story1	W70	77	Wall	77	490	Self Weight	LinStatic	108.36	-2114.54	1039.07	518.42
Story1	W70	77	Wall	77	406	Self Weight	LinStatic	-445.04	-2225.22	355.43	-376.7
Story1	W70	77	Wall	77	491	Self Weight	LinStatic	-472.85	-2364.23	45.24	-471.76
Story1	W70	77	Wall	77	415	Super Dead	LinStatic	26	-266.66	83.12	47.96
Story1	W70	77	Wall	77	490	Super Dead	LinStatic	30.93	-242.03	120.9	76.78
Story1	W70	77	Wall	77	406	Super Dead	LinStatic	-51.71	-258.56	35.25	-45.87
Story1	W70	77	Wall	77	491	Super Dead	LinStatic	-56.64	-283.19	-2.54	-56.61
Story1	W70	77	Wall	77	415	Live	LinStatic	36.9	-385.33	120.23	68.74
Story1	W70	77	Wall	77	490	Live	LinStatic	43.96	-350.08	174.79	110.32
Story1	W70	77	Wall	77	406	Live	LinStatic	-74.76	-373.82	51.21	-66.24
Story1	W70	77	Wall	77	491	Live	LinStatic	-81.82	-409.08	-3.35	-81.78
Story1	W70	77	Wall	77	415	EQX	LinStatic	-101.07	-142.24	51.95	-65.77
Story1	W70	77	Wall	77	490	EQX	LinStatic	-58.08	72.7	68.45	101.97
Story1	W70	77	Wall	77	406	EQX	LinStatic	17.57	87.83	-47.91	112.11
Story1	W70	77	Wall	77	491	EQX	LinStatic	-25.42	-127.11	-64.41	5.79
Story1	W70	77	Wall	77	415	EQY	LinStatic	-1136.81	-810.38	399.6	-541.95
Story1	W70	77	Wall	77	490	EQY	LinStatic	-944.2	152.64	426.75	299.12
Story1	W70	77	Wall	77	406	EQY	LinStatic	71.14	355.71	-52.26	365
Story1	W70	77	Wall	77	491	EQY	LinStatic	-121.46	-607.32	-79.41	-108.81
Story1	W70	77	Wall	77	415	Dead	Combination	106.56	-2520.21	812	337.3
Story1	W70	77	Wall	77	490	Dead	Combination	139.29	-2356.58	1159.98	595.14
Story1	W70	77	Wall	77	406	Dead	Combination	-496.76	-2483.78	390.68	-422.7
Story1	W70	77	Wall	77	491	Dead	Combination	-529.48	-2647.42	42.7	-528.62
Story1	W73	78	Wall	78	414	Self Weight	LinStatic	9.42	-420.54	1951.24	1757.49
Story1	W73	78	Wall	78	415	Self Weight	LinStatic	-375.42	-2344.75	1131.46	139.83
Story1	W73	78	Wall	78	491	Self Weight	LinStatic	-472.85	-2364.23	104.14	-467.13
Story1	W73	78	Wall	78	407	Self Weight	LinStatic	-88.01	-440.03	923.93	676.53

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W73	78	Wall	78	414	Super Dead	LinStatic	17.78	-45.96	221.28	209.47
Story1	W73	78	Wall	78	415	Super Dead	LinStatic	-28.54	-277.57	126.74	24.62
Story1	W73	78	Wall	78	491	Super Dead	LinStatic	-56.64	-283.19	8.85	-56.29
Story1	W73	78	Wall	78	407	Super Dead	LinStatic	-10.32	-51.58	103.39	74.48
Story1	W73	78	Wall	78	414	Live	LinStatic	25.02	-66.57	320.15	302.63
Story1	W73	78	Wall	78	415	Live	LinStatic	-41.89	-401.09	183.44	35.23
Story1	W73	78	Wall	78	491	Live	LinStatic	-81.82	-409.08	12.93	-81.31
Story1	W73	78	Wall	78	407	Live	LinStatic	-14.91	-74.56	149.64	107.85
Story1	W73	78	Wall	78	414	EQX	LinStatic	-338.06	-18.32	298.85	160.73
Story1	W73	78	Wall	78	415	EQX	LinStatic	-373.76	-196.78	166.15	-97.02
Story1	W73	78	Wall	78	491	EQX	LinStatic	-25.42	-127.11	53	-2.83
Story1	W73	78	Wall	78	407	EQX	LinStatic	10.27	51.35	185.69	217.63
Story1	W73	78	Wall	78	414	EQY	LinStatic	-2530.26	-235.27	2053.77	969.84
Story1	W73	78	Wall	78	415	EQY	LinStatic	-2708.13	-1124.65	1204.94	-474.61
Story1	W73	78	Wall	78	491	EQY	LinStatic	-121.46	-607.32	424.09	124.35
Story1	W73	78	Wall	78	407	EQY	LinStatic	56.41	282.06	1272.92	1447.15
Story1	W73	78	Wall	78	414	Dead	Combination	27.2	-466.51	2172.52	1966.85
Story1	W73	78	Wall	78	415	Dead	Combination	-403.96	-2622.32	1258.2	164.16
Story1	W73	78	Wall	78	491	Dead	Combination	-529.48	-2647.42	112.99	-523.47
Story1	W73	78	Wall	78	407	Dead	Combination	-98.32	-491.61	1027.32	751
Story1	W74	79	Wall	79	416	Self Weight	LinStatic	-984.4	-3459.06	730.98	-784.61
Story1	W74	79	Wall	79	405	Self Weight	LinStatic	-838	-2727.07	-1042.94	-375.46
Story1	W74	79	Wall	79	490	Self Weight	LinStatic	20.18	-2555.43	321.11	59.61
Story1	W74	79	Wall	79	415	Self Weight	LinStatic	-126.22	-3287.42	2095.04	917.58
Story1	W74	79	Wall	79	416	Super Dead	LinStatic	-118.47	-414.4	87.56	-94.5
Story1	W74	79	Wall	79	405	Super Dead	LinStatic	-98.18	-312.95	-120.27	-44.33
Story1	W74	79	Wall	79	490	Super Dead	LinStatic	21.53	-289.01	36.77	25.83
Story1	W74	79	Wall	79	415	Super Dead	LinStatic	1.24	-390.46	244.6	118.74
Story1	W74	79	Wall	79	416	Live	LinStatic	-171.11	-598.61	126.49	-136.49
Story1	W74	79	Wall	79	405	Live	LinStatic	-141.91	-452.62	-173.92	-64.07
Story1	W74	79	Wall	79	490	Live	LinStatic	30.34	-418.17	53.18	36.56
Story1	W74	79	Wall	79	415	Live	LinStatic	1.14	-564.16	353.59	171.16
Story1	W74	79	Wall	79	416	EQX	LinStatic	-30.41	-177.6	202.85	111.78
Story1	W74	79	Wall	79	405	EQX	LinStatic	1.71	-16.97	85.61	78.49
Story1	W74	79	Wall	79	490	EQX	LinStatic	-79.25	-33.16	59.82	7.9
Story1	W74	79	Wall	79	415	EQX	LinStatic	-111.38	-193.79	177.05	29.2
Story1	W74	79	Wall	79	416	EQY	LinStatic	-119.8	-842.75	1113.12	689.06
Story1	W74	79	Wall	79	405	EQY	LinStatic	-35	-418.73	419.01	233.98
Story1	W74	79	Wall	79	490	EQY	LinStatic	-1101.12	-631.95	423.12	-382.74
Story1	W74	79	Wall	79	415	EQY	LinStatic	-1185.92	-1055.98	1117.23	-1.83
Story1	W74	79	Wall	79	416	Dead	Combination	-1102.87	-3873.46	818.55	-879.11
Story1	W74	79	Wall	79	405	Dead	Combination	-936.18	-3040.02	-1163.21	-419.79
Story1	W74	79	Wall	79	490	Dead	Combination	41.71	-2844.44	357.88	85.43
Story1	W74	79	Wall	79	415	Dead	Combination	-124.97	-3677.88	2339.64	1036.21
Story1	W75	80	Wall	80	429	Self Weight	LinStatic	-1903.86	-1790.42	-952.77	-892.68

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W75	80	Wall	80	430	Self Weight	LinStatic	-1811.82	-1330.24	-1638.03	84.6
Story1	W75	80	Wall	80	195	Self Weight	LinStatic	-201.64	-1008.2	-256.07	-127.21
Story1	W75	80	Wall	80	492	Self Weight	LinStatic	-293.68	-1468.39	429.18	-153.58
Story1	W75	80	Wall	80	429	Super Dead	LinStatic	-49.7	-42.7	-28.46	-17.53
Story1	W75	80	Wall	80	430	Super Dead	LinStatic	-47.06	-29.49	-50.9	13.38
Story1	W75	80	Wall	80	195	Super Dead	LinStatic	-4.18	-20.92	-15.97	5.48
Story1	W75	80	Wall	80	492	Super Dead	LinStatic	-6.83	-34.13	6.47	-5.37
Story1	W75	80	Wall	80	429	Live	LinStatic	-78.94	-68.57	-44.54	-28.91
Story1	W75	80	Wall	80	430	Live	LinStatic	-74.79	-47.81	-79.35	19.19
Story1	W75	80	Wall	80	195	Live	LinStatic	-6.84	-34.22	-23.66	6.8
Story1	W75	80	Wall	80	492	Live	LinStatic	-11	-54.98	11.15	-8.33
Story1	W75	80	Wall	80	429	EQX	LinStatic	1350.34	941.59	1238.27	2400.99
Story1	W75	80	Wall	80	430	EQX	LinStatic	1191.88	149.28	2518.25	3242.22
Story1	W75	80	Wall	80	195	EQX	LinStatic	-18.56	-92.81	1599.09	1543.83
Story1	W75	80	Wall	80	492	EQX	LinStatic	139.9	699.5	319.1	844.1
Story1	W75	80	Wall	80	429	EQY	LinStatic	-71.95	-44.88	-64.86	7.85
Story1	W75	80	Wall	80	430	EQY	LinStatic	-64.77	-8.99	-129.93	96
Story1	W75	80	Wall	80	195	EQY	LinStatic	0.83	4.13	-83.17	85.66
Story1	W75	80	Wall	80	492	EQY	LinStatic	-6.35	-31.76	-18.1	3.06
Story1	W75	80	Wall	80	429	Dead	Combination	-1953.55	-1833.12	-981.23	-910.26
Story1	W75	80	Wall	80	430	Dead	Combination	-1858.87	-1359.73	-1688.92	97.97
Story1	W75	80	Wall	80	195	Dead	Combination	-205.82	-1029.12	-272.04	-124.05
Story1	W75	80	Wall	80	492	Dead	Combination	-300.5	-1502.51	435.65	-159.21
Story1	W77	81	Wall	81	493	Self Weight	LinStatic	172.7	-2622.38	-1744.76	1010.62
Story1	W77	81	Wall	81	429	Self Weight	LinStatic	432.55	-1323.14	-901.45	812.97
Story1	W77	81	Wall	81	492	Self Weight	LinStatic	-293.68	-1468.39	358.74	-192.79
Story1	W77	81	Wall	81	196	Self Weight	LinStatic	-553.53	-2767.63	-484.56	-452.12
Story1	W77	81	Wall	81	493	Super Dead	LinStatic	-0.43	-56.21	-41.83	21.96
Story1	W77	81	Wall	81	429	Super Dead	LinStatic	4.44	-31.87	-23.58	16.04
Story1	W77	81	Wall	81	492	Super Dead	LinStatic	-6.83	-34.13	6.43	-5.39
Story1	W77	81	Wall	81	196	Super Dead	LinStatic	-11.69	-58.46	-11.82	-8.88
Story1	W77	81	Wall	81	493	Live	LinStatic	0.23	-91.54	-67.13	35.66
Story1	W77	81	Wall	81	429	Live	LinStatic	8.31	-51.12	-37.45	26.4
Story1	W77	81	Wall	81	492	Live	LinStatic	-11	-54.98	10.75	-8.51
Story1	W77	81	Wall	81	196	Live	LinStatic	-19.08	-95.4	-18.93	-14.64
Story1	W77	81	Wall	81	493	EQX	LinStatic	53.99	-149.76	705.29	664.72
Story1	W77	81	Wall	81	429	EQX	LinStatic	227.34	716.99	581.86	1103.44
Story1	W77	81	Wall	81	492	EQX	LinStatic	139.9	699.5	-82.23	711.34
Story1	W77	81	Wall	81	196	EQX	LinStatic	-33.45	-167.25	41.2	-21.78
Story1	W77	81	Wall	81	493	EQY	LinStatic	-14.2	2.28	-37.65	32.58
Story1	W77	81	Wall	81	429	EQY	LinStatic	-21.61	-34.81	-32.42	4.87
Story1	W77	81	Wall	81	492	EQY	LinStatic	-6.35	-31.76	-0.91	-6.32
Story1	W77	81	Wall	81	196	EQY	LinStatic	1.07	5.33	-6.14	9.69
Story1	W77	81	Wall	81	493	Dead	Combination	172.27	-2678.59	-1786.59	1032.4
Story1	W77	81	Wall	81	429	Dead	Combination	436.99	-1355.02	-925.04	828.82

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W77	81	Wall	81	492	Dead	Combination	-300.5	-1502.51	365.17	-198.26
Story1	W77	81	Wall	81	196	Dead	Combination	-565.22	-2826.09	-496.38	-461.04
Story1	W79	82	Wall	82	95	Self Weight	LinStatic	-2237.74	-4215.59	1946.88	-1043.02
Story1	W79	82	Wall	82	431	Self Weight	LinStatic	-1614.68	-1100.29	-1111.12	-216.99
Story1	W79	82	Wall	82	429	Self Weight	LinStatic	564.28	-664.5	-3157.05	3166.17
Story1	W79	82	Wall	82	493	Self Weight	LinStatic	-58.78	-3779.8	-99.04	-56.15
Story1	W79	82	Wall	82	95	Super Dead	LinStatic	-51.44	-95.33	40.95	-26.93
Story1	W79	82	Wall	82	431	Super Dead	LinStatic	-37.58	-26.03	-28.26	-2.96
Story1	W79	82	Wall	82	429	Super Dead	LinStatic	7.41	-17.03	-74.56	70.75
Story1	W79	82	Wall	82	493	Super Dead	LinStatic	-6.46	-86.34	-5.36	-6.1
Story1	W79	82	Wall	82	95	Live	LinStatic	-82.99	-154.14	66.86	-42.83
Story1	W79	82	Wall	82	431	Live	LinStatic	-60.53	-41.84	-45.02	-5.2
Story1	W79	82	Wall	82	429	Live	LinStatic	13.11	-27.11	-119.89	114.56
Story1	W79	82	Wall	82	493	Live	LinStatic	-9.35	-139.41	-8	-8.86
Story1	W79	82	Wall	82	95	EQX	LinStatic	705.06	737.03	313.87	1035.32
Story1	W79	82	Wall	82	431	EQX	LinStatic	709.06	757.01	1003.27	1736.59
Story1	W79	82	Wall	82	429	EQX	LinStatic	215.61	658.32	1184.91	1642.37
Story1	W79	82	Wall	82	493	EQX	LinStatic	211.61	638.34	495.51	964.47
Story1	W79	82	Wall	82	95	EQY	LinStatic	-35.19	-42.66	-10.52	-27.77
Story1	W79	82	Wall	82	431	EQY	LinStatic	-33.17	-32.59	-46.52	13.64
Story1	W79	82	Wall	82	429	EQY	LinStatic	-20.67	-30.09	-61.78	36.58
Story1	W79	82	Wall	82	493	EQY	LinStatic	-22.68	-40.16	-25.78	-4.21
Story1	W79	82	Wall	82	95	Dead	Combination	-2289.18	-4310.93	1987.83	-1069.95
Story1	W79	82	Wall	82	431	Dead	Combination	-1652.26	-1126.32	-1139.38	-219.96
Story1	W79	82	Wall	82	429	Dead	Combination	571.69	-681.53	-3231.61	3236.88
Story1	W79	82	Wall	82	493	Dead	Combination	-65.24	-3866.14	-104.4	-62.37
Story1	W80	83	Wall	83	433	Self Weight	LinStatic	416.78	-1317.89	904.31	802.46
Story1	W80	83	Wall	83	494	Self Weight	LinStatic	153.92	-2632.16	1745.77	994.33
Story1	W80	83	Wall	83	232	Self Weight	LinStatic	-554.78	-2773.9	491.97	-450.6
Story1	W80	83	Wall	83	495	Self Weight	LinStatic	-291.93	-1459.63	-349.5	-195.31
Story1	W80	83	Wall	83	433	Super Dead	LinStatic	9.93	-23.05	15.28	15.92
Story1	W80	83	Wall	83	494	Super Dead	LinStatic	3.2	-56.7	32.2	17.23
Story1	W80	83	Wall	83	232	Super Dead	LinStatic	-11.95	-59.73	10.14	-9.88
Story1	W80	83	Wall	83	495	Super Dead	LinStatic	-5.22	-26.08	-6.79	-3.2
Story1	W80	83	Wall	83	433	Live	LinStatic	15.95	-38.71	25.8	26.21
Story1	W80	83	Wall	83	494	Live	LinStatic	5.24	-92.27	53.61	28.95
Story1	W80	83	Wall	83	232	Live	LinStatic	-19.44	-97.21	16.6	-16.05
Story1	W80	83	Wall	83	495	Live	LinStatic	-8.73	-43.65	-11.21	-5.44
Story1	W80	83	Wall	83	433	EQX	LinStatic	-187.2	-726.34	572.87	176.35
Story1	W80	83	Wall	83	494	EQX	LinStatic	-7.75	170.9	701.67	788.91
Story1	W80	83	Wall	83	232	EQX	LinStatic	35.93	179.63	27.35	184.66
Story1	W80	83	Wall	83	495	EQX	LinStatic	-143.52	-717.61	-101.46	-126.12
Story1	W80	83	Wall	83	433	EQY	LinStatic	9.41	37.74	-29.92	56.67
Story1	W80	83	Wall	83	494	EQY	LinStatic	0.1	-8.78	-36.62	32.55
Story1	W80	83	Wall	83	232	EQY	LinStatic	-1.83	-9.16	-1.66	-1.48

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W80	83	Wall	83	495	EQY	LinStatic	7.47	37.35	5.05	38.18
Story1	W80	83	Wall	83	433	Dead	Combination	426.71	-1340.94	919.59	818.34
Story1	W80	83	Wall	83	494	Dead	Combination	157.13	-2688.86	1777.98	1011.44
Story1	W80	83	Wall	83	232	Dead	Combination	-566.73	-2833.63	502.1	-460.49
Story1	W80	83	Wall	83	495	Dead	Combination	-297.14	-1485.71	-356.29	-198.52
Story1	W81	84	Wall	84	432	Self Weight	LinStatic	-1812.28	-1330.86	1633.84	79.91
Story1	W81	84	Wall	84	433	Self Weight	LinStatic	-1902.45	-1781.73	952.23	-887.95
Story1	W81	84	Wall	84	495	Self Weight	LinStatic	-291.93	-1459.63	-427.17	-152.34
Story1	W81	84	Wall	84	299	Self Weight	LinStatic	-201.75	-1008.76	254.44	-128.23
Story1	W81	84	Wall	84	432	Super Dead	LinStatic	-31.05	-27.43	17.71	-11.44
Story1	W81	84	Wall	84	433	Super Dead	LinStatic	-31.85	-31.41	11.9	-19.73
Story1	W81	84	Wall	84	495	Super Dead	LinStatic	-5.22	-26.08	-11.09	-0.42
Story1	W81	84	Wall	84	299	Super Dead	LinStatic	-4.42	-22.1	-5.28	-2.96
Story1	W81	84	Wall	84	432	Live	LinStatic	-52.32	-44.92	32.72	-15.69
Story1	W81	84	Wall	84	433	Live	LinStatic	-53.87	-52.67	21.29	-31.98
Story1	W81	84	Wall	84	495	Live	LinStatic	-8.73	-43.65	-17.63	-1.37
Story1	W81	84	Wall	84	299	Live	LinStatic	-7.18	-35.89	-6.2	-5.9
Story1	W81	84	Wall	84	432	EQX	LinStatic	-1174.36	-141.93	2524.66	1918.75
Story1	W81	84	Wall	84	433	EQX	LinStatic	-1337.25	-956.35	1237.2	104.98
Story1	W81	84	Wall	84	495	EQX	LinStatic	-143.52	-717.61	312.67	-6.12
Story1	W81	84	Wall	84	299	EQX	LinStatic	19.36	96.82	1600.12	1658.68
Story1	W81	84	Wall	84	432	EQY	LinStatic	59.46	6.61	-131.7	167.36
Story1	W81	84	Wall	84	433	EQY	LinStatic	68.03	49.46	-64.48	123.89
Story1	W81	84	Wall	84	495	EQY	LinStatic	7.47	37.35	-16.28	44.51
Story1	W81	84	Wall	84	299	EQY	LinStatic	-1.1	-5.5	-83.5	80.22
Story1	W81	84	Wall	84	432	Dead	Combination	-1843.33	-1358.29	1651.56	68.45
Story1	W81	84	Wall	84	433	Dead	Combination	-1934.3	-1813.15	964.13	-907.69
Story1	W81	84	Wall	84	495	Dead	Combination	-297.14	-1485.71	-438.27	-153.02
Story1	W81	84	Wall	84	299	Dead	Combination	-206.17	-1030.86	249.16	-136.74
Story1	W82	85	Wall	85	434	Self Weight	LinStatic	-1607.4	-1087.82	1100.32	-217.04
Story1	W82	85	Wall	85	230	Self Weight	LinStatic	-2234.3	-4222.35	-1957.46	-1032.94
Story1	W82	85	Wall	85	494	Self Weight	LinStatic	-77.86	-3791.06	97.94	-75.28
Story1	W82	85	Wall	85	433	Self Weight	LinStatic	549.05	-656.53	3155.72	3159.03
Story1	W82	85	Wall	85	434	Super Dead	LinStatic	-29.15	-17.8	16.52	-6.01
Story1	W82	85	Wall	85	230	Super Dead	LinStatic	-42.46	-84.35	-43.5	-15.13
Story1	W82	85	Wall	85	494	Super Dead	LinStatic	-0.65	-75.99	-1.19	-0.63
Story1	W82	85	Wall	85	433	Super Dead	LinStatic	12.66	-9.44	58.83	61.47
Story1	W82	85	Wall	85	434	Live	LinStatic	-48.67	-30.23	28.49	-9.5
Story1	W82	85	Wall	85	230	Live	LinStatic	-70.37	-138.75	-70.49	-26.21
Story1	W82	85	Wall	85	494	Live	LinStatic	-1.29	-124.93	-1.2	-1.28
Story1	W82	85	Wall	85	433	Live	LinStatic	20.41	-16.41	97.78	101.5
Story1	W82	85	Wall	85	434	EQX	LinStatic	-723.52	-783.98	1025.94	272.64
Story1	W82	85	Wall	85	230	EQX	LinStatic	-710.86	-720.7	336.53	-379.22
Story1	W82	85	Wall	85	494	EQX	LinStatic	-164.21	-611.37	494.44	154.86
Story1	W82	85	Wall	85	433	EQX	LinStatic	-176.86	-674.64	1183.86	783.99

Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W82	85	Wall	85	434	EQY	LinStatic	37.7	40.77	-53.19	92.45
Story1	W82	85	Wall	85	230	EQY	LinStatic	37.09	37.75	-17.27	54.7
Story1	W82	85	Wall	85	494	EQY	LinStatic	8.25	31.98	-25.69	48.41
Story1	W82	85	Wall	85	433	EQY	LinStatic	8.86	35	-61.61	84.91
Story1	W82	85	Wall	85	434	Dead	Combination	-1636.55	-1105.62	1116.84	-223.13
Story1	W82	85	Wall	85	230	Dead	Combination	-2276.77	-4306.7	-2000.96	-1048.08
Story1	W82	85	Wall	85	494	Dead	Combination	-78.51	-3867.05	96.75	-76.04
Story1	W82	85	Wall	85	433	Dead	Combination	561.7	-665.97	3214.55	3220.5
Story1	W1	3	Wall	3	408	Self Weight	LinStatic	498.53	-133.05	954.54	1188.15
Story1	W1	3	Wall	3	464	Self Weight	LinStatic	338.36	-933.91	320.55	414.55
Story1	W1	3	Wall	3	423	Self Weight	LinStatic	-208.66	-1043.32	619.11	120.64
Story1	W1	3	Wall	3	458	Self Weight	LinStatic	-48.49	-242.46	1253.1	1111.37
Story1	W1	3	Wall	3	408	Super Dead	LinStatic	150.75	-26.74	227	305.73
Story1	W1	3	Wall	3	464	Super Dead	LinStatic	112.25	-219.26	70.98	126.81
Story1	W1	3	Wall	3	423	Super Dead	LinStatic	-50.36	-251.78	146.09	26.37
Story1	W1	3	Wall	3	458	Super Dead	LinStatic	-11.85	-59.26	302.11	267.48
Story1	W1	3	Wall	3	408	Live	LinStatic	217.32	-38.67	328.03	441.44
Story1	W1	3	Wall	3	464	Live	LinStatic	161.67	-316.97	102.64	182.75
Story1	W1	3	Wall	3	423	Live	LinStatic	-72.77	-363.85	211.09	38.09
Story1	W1	3	Wall	3	458	Live	LinStatic	-17.11	-85.56	436.48	386.48
Story1	W1	3	Wall	3	408	EQX	LinStatic	-765.95	-40.05	-3.73	-40.03
Story1	W1	3	Wall	3	464	EQX	LinStatic	-792.77	-174.16	114.89	-153.51
Story1	W1	3	Wall	3	423	EQX	LinStatic	-3.25	-16.26	-35.05	25.89
Story1	W1	3	Wall	3	458	EQX	LinStatic	23.57	117.85	-153.67	231.45
Story1	W1	3	Wall	3	408	EQY	LinStatic	4539.37	237.35	22.08	4539.48
Story1	W1	3	Wall	3	464	EQY	LinStatic	4698.34	1032.18	-680.92	4820.72
Story1	W1	3	Wall	3	423	EQY	LinStatic	19.27	96.37	207.74	269.11
Story1	W1	3	Wall	3	458	EQY	LinStatic	-139.69	-698.46	910.74	533.55
Story1	W1	3	Wall	3	408	Dead	Combination	649.28	-159.8	1181.53	1493.61
Story1	W1	3	Wall	3	464	Dead	Combination	450.61	-1153.17	391.52	541.08
Story1	W1	3	Wall	3	423	Dead	Combination	-259.02	-1295.1	765.2	147.01
Story1	W1	3	Wall	3	458	Dead	Combination	-60.34	-301.72	1555.22	1378.86
Story1	W2	4	Wall	4	464	Self Weight	LinStatic	-1840.95	-1369.77	134.97	-1333.85
Story1	W2	4	Wall	4	466	Self Weight	LinStatic	-1842.91	-1379.58	-34.52	-1377.02
Story1	W2	4	Wall	4	424	Self Weight	LinStatic	-210.62	-1053.12	-67.69	-205.22
Story1	W2	4	Wall	4	423	Self Weight	LinStatic	-208.66	-1043.32	101.8	-196.43
Story1	W2	4	Wall	4	464	Super Dead	LinStatic	-387.89	-319.29	28.57	-308.94
Story1	W2	4	Wall	4	466	Super Dead	LinStatic	-388.23	-320.98	-11.26	-319.14
Story1	W2	4	Wall	4	424	Super Dead	LinStatic	-50.69	-253.47	-16.98	-49.28
Story1	W2	4	Wall	4	423	Super Dead	LinStatic	-50.36	-251.78	22.85	-47.79
Story1	W2	4	Wall	4	464	Live	LinStatic	-560.54	-461.41	41.18	-446.53
Story1	W2	4	Wall	4	466	Live	LinStatic	-561.02	-463.83	-16.38	-461.14
Story1	W2	4	Wall	4	424	Live	LinStatic	-73.25	-366.27	-24.57	-71.21
Story1	W2	4	Wall	4	423	Live	LinStatic	-72.77	-363.85	32.99	-69.08
Story1	W2	4	Wall	4	464	EQX	LinStatic	1.79	-15.25	-161.25	154.74



Table 5.7 - Element Forces - Area Shells (Part 1 of 2, continued)

Story	Shell Object	Unique Name	Design Type	Shell Element	Joint	Output Case	Case Type	F11 lb/ft	F22 lb/ft	F12 lb/ft	FMax lb/ft
Story1	W2	4	Wall	4	466	EQX	LinStatic	8.08	16.22	-161.23	173.43
Story1	W2	4	Wall	4	424	EQX	LinStatic	3.04	15.21	-54.73	64.2
Story1	W2	4	Wall	4	423	EQX	LinStatic	-3.25	-16.26	-54.75	45.38
Story1	W2	4	Wall	4	464	EQY	LinStatic	-10.59	90.4	955.65	996.89
Story1	W2	4	Wall	4	466	EQY	LinStatic	-47.89	-96.14	955.52	883.81
Story1	W2	4	Wall	4	424	EQY	LinStatic	-18.03	-90.17	324.37	272.27
Story1	W2	4	Wall	4	423	EQY	LinStatic	19.27	96.37	324.5	384.6
Story1	W2	4	Wall	4	464	Dead	Combination	-2228.84	-1689.06	163.54	-1643.38
Story1	W2	4	Wall	4	466	Dead	Combination	-2231.14	-1700.55	-45.78	-1696.63
Story1	W2	4	Wall	4	424	Dead	Combination	-261.32	-1306.59	-84.67	-254.5
Story1	W2	4	Wall	4	423	Dead	Combination	-259.02	-1295.1	124.65	-244.23
Story1	W4	6	Wall	6	466	Self Weight	LinStatic	-158.69	-1042.74	-392.59	-9.52
Story1	W4	6	Wall	6	425	Self Weight	LinStatic	18.19	-158.36	-952.11	886.11
Story1	W4	6	Wall	6	457	Self Weight	LinStatic	-33.75	-168.75	-1156.77	1057.48
Story1	W4	6	Wall	6	424	Self Weight	LinStatic	-210.62	-1053.12	-597.24	98.98
Story1	W4	6	Wall	6	466	Super Dead	LinStatic	26.58	-238.01	-83.39	50.67
Story1	W4	6	Wall	6	425	Super Dead	LinStatic	67.97	-31.11	-226.58	250.36
Story1	W4	6	Wall	6	457	Super Dead	LinStatic	-9.31	-46.56	-285.51	258.18
Story1	W4	6	Wall	6	424	Super Dead	LinStatic	-50.69	-253.47	-142.32	22.66
Story1	W4	6	Wall	6	466	Live	LinStatic	38.97	-343.83	-120.43	73.7
Story1	W4	6	Wall	6	425	Live	LinStatic	98.75	-44.92	-327.43	362.13
Story1	W4	6	Wall	6	457	Live	LinStatic	-13.47	-67.37	-412.69	373.15
Story1	W4	6	Wall	6	424	Live	LinStatic	-73.25	-366.27	-205.69	32.77
Story1	W4	6	Wall	6	466	EQX	LinStatic	802.87	175.18	116.37	823.75
Story1	W4	6	Wall	6	425	EQX	LinStatic	776.08	41.2	-4.06	776.1
Story1	W4	6	Wall	6	457	EQX	LinStatic	-23.75	-118.76	-155.59	91.42
Story1	W4	6	Wall	6	424	EQX	LinStatic	3.04	15.21	-35.16	44.82
Story1	W4	6	Wall	6	466	EQY	LinStatic	-4758.2	-1038.2	-689.68	-914.45
Story1	W4	6	Wall	6	425	EQY	LinStatic	-4599.4	-244.18	24.04	-244.04
Story1	W4	6	Wall	6	457	EQY	LinStatic	140.77	703.86	922.12	1386.46
Story1	W4	6	Wall	6	424	EQY	LinStatic	-18.03	-90.17	208.4	157.4
Story1	W4	6	Wall	6	466	Dead	Combination	-132.1	-1280.75	-475.98	39.5
Story1	W4	6	Wall	6	425	Dead	Combination	86.15	-189.47	-1178.69	1135.06
Story1	W4	6	Wall	6	457	Dead	Combination	-43.06	-215.31	-1442.28	1315.66
Story1	W4	6	Wall	6	424	Dead	Combination	-261.32	-1306.59	-739.56	121.64

Table 5.7 - Element Forces - Area Shells (Part 2 of 2)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
-1879.1	1670.4	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2174.33	2036.02	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1986.98	1879.37	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1898.79	1775.16	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-80.74	78.85	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-44.71	38.83	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-43.01	39.72	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-78.72	82.68	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-121.51	117.21	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-71.58	62.23	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-68.69	63.13	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-119.17	123.68	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1165.1	2502.18	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1776.47	2475.79	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1974.29	2879.73	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1355.14	2903.29	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-106.25	102.11	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-13.46	14.6	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
0.97	4.55	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-100.93	102.55	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-1948.67	1733.55	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2213.45	2065.39	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2024.04	1910.75	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-1971.87	1848.25	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2094.63	1822.57	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-1969.68	1710.22	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1888.52	1770.96	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06



Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-1924.9	1771.69	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-49.42	42.88	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-50.66	45.74	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-46.16	45.36	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-46.87	42.97	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-79.23	68.75	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-80.32	71.93	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-73.75	71.97	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-75.04	68.81	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-193.04	1654.46	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1340.42	2764.1	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-988.32	2021.56	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
60	1118.71	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-80.2	85.66	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-95.22	143.2	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-69.25	104.66	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-59.37	57.86	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2142.84	1864.21	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2018.16	1752.8	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-1933.78	1814.88	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-1971.55	1814.37	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2043.76	1816.55	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2115.96	1892.27	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2001.34	1880.27	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1971.29	1856.36	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-42.75	37.76	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-49.53	48.9	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-47.81	50.25	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-41.63	38.43	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-68.83	60.58	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-79.45	77.11	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-76.33	78.77	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-66.83	61.41	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1828.54	3243.93	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-2227.83	3066.78	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-2379.1	3507.49	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1966.9	3683.96	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-99.26	167.97	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-65.76	158.8	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-85.39	181.62	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-118.22	190.76	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2081.65	1848.58	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2163.48	1937.25	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2046.22	1925.44	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2007.72	1887.56	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2394.25	2280	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-1746.66	1587.18	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2020.83	2027.88	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2119.84	1953.97	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-43.23	39.56	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-33.94	32.91	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-39.53	42.15	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-42.39	38.92	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-71.81	65.94	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-55.83	53.44	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-65.17	68.81	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-69.44	63.68	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1843.67	2704.69	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1648.41	1789.19	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1160.5	1152.79	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1261.75	1878.71	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-65.31	140.05	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-13.17	92.65	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
0.81	59.69	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-46.47	97.28	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2435.89	2317.13	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-1779.36	1618.1	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2060.05	2069.39	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2160.93	1991.16	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1372.67	1312.06	0.018	0.013	0.0003534	0.018	0.013	3.25	0.7	3.32
-2542.05	2405.58	-0.025	-0.006	0.002	-0.006	-0.025	3.25	-0.49	3.29
-2523.3	2316.14	0.0003867	0.002	-0.001	0.002	0.0002203	0.04	-0.49	0.49
-1418.22	1307.93	-0.0004592	-0.002	-0.002	0.001	-0.003	0.04	0.7	0.7
-109.59	120.02	-0.001	-0.0002018	-0.0001163	-0.0001896	-0.001	-0.002889	-0.07	0.07
-93.79	96.39	-0.001	0.0001786	0.0002211	0.0002154	-0.001	-0.002889	-0.0008786	0.00302
-106.94	114.91	-6.074E-05	-0.0003037	1.138E-05	-6.021E-05	-0.0003042	0.03	-0.0008786	0.03
-123.92	140.96	0.0001526	0.001	-0.000326	0.001	1.113E-05	0.03	-0.07	0.08
-158.8	172	-0.002	-0.0002187	-0.0001616	-0.0002017	-0.002	0.01	-0.1	0.1
-140.75	141.96	-0.002	0.0002222	0.0003182	0.000274	-0.002	0.01	-0.003566	0.01
-159.44	167.57	-8.345E-05	-0.0004173	1.341E-05	-8.291E-05	-0.0004178	0.04	-0.003566	0.04
-179.85	202.25	0.000212	0.001	-0.0004664	0.001	5.768E-06	0.04	-0.1	0.11
-880.96	2036.96	-0.042	-0.021	-0.002	-0.02	-0.042	-4.95	-1.65	5.21
-1017.04	2181.79	0.024	0.01	0.001	0.024	0.01	-4.95	0.57	4.98
-883.32	1939.39	-0.001	-0.005	0.002	-0.0003299	-0.006	0.14	0.57	0.59
-748.25	1797.15	0.002	0.009	-0.001	0.009	0.002	0.14	-1.65	1.66
-182.04	251.7	-0.005	-0.006	-0.002	-0.004	-0.007	-0.09	-0.57	0.58
-193.47	215.24	-0.005	0.003	-0.0002575	0.003	-0.005	-0.09	0.14	0.17
-213.51	252.88	-0.0004014	-0.002	0.001	0.0001184	-0.003	0.01	0.14	0.14
-203.07	293.59	0.001	0.003	-0.0002376	0.003	0.001	0.01	-0.57	0.57
-1447.33	1379.6	0.016	0.013	0.0002371	0.016	0.013	3.25	0.62	3.31

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2605.92	2459.09	-0.026	-0.006	0.002	-0.006	-0.026	3.25	-0.49	3.28
-2594.63	2379.26	0.0003259	0.002	-0.001	0.002	0.0001424	0.07	-0.49	0.49
-1516.92	1406.76	-0.0003067	-0.002	-0.002	0.001	-0.003	0.07	0.62	0.63
-2063.62	1840.94	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2069.84	1850.98	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1976.37	1860.67	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1979.41	1860.82	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-45.31	39.72	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-52.15	50.88	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-50.27	52.97	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-43.94	40.45	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-72.7	63.68	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-82.87	79.68	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-79.69	82.53	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-70.3	64.52	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1273.89	2997.92	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-2001	3331.2	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-2320.13	3759.6	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1600.52	3424.5	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-111.36	155.23	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-95.51	172.49	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-104.47	194.68	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-120.72	177.33	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2105.02	1875.84	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2119.61	1897.69	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2023.7	1908.49	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2018.88	1895.04	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2073.19	1854.59	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2196.67	2005.5	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2062.69	1952.53	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2041.45	1928.93	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-242.99	218.44	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-251.54	227.82	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-238.67	224.77	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-237.63	225.23	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-351.22	315.69	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-363.82	329.59	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-345.1	325.05	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-343.55	325.58	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-271.87	307.39	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-341.16	492.24	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-221.56	310	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-170.24	165.11	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-1872.4	2116.45	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-2348.92	3388.94	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-1526	2135.51	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-1173.09	1137.88	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2316.05	2072.84	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2448.02	2233.02	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2301.28	2177.18	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2279.06	2154.11	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2048.1	1810.25	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2131.46	1922.62	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2041.39	1954.09	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1955.3	1814.72	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-243.54	216.95	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-244.95	218.96	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-234.85	221.66	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-232.44	217.83	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-351.86	313.37	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-354.24	316.73	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-339.61	320.66	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-335.82	314.61	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-408.02	555.95	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-369.74	610.01	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-377.99	671.91	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-418.73	618.04	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-2809.89	3828.75	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-2546.36	4201.04	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-2603.09	4627.19	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-2883.62	4256.25	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2291.2	2026.56	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2376.01	2140.97	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2275.79	2175.02	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2187.2	2031.77	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2010.68	1779.47	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2099.12	1896.39	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2012.48	1923.21	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1925.97	1787.47	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-242.77	216.91	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-240.87	215.08	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-231.41	217.79	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-231.91	217.76	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-350.58	313.15	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-348.35	311.14	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-334.64	315.07	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-334.92	314.37	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-449.49	715.87	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-401.2	711.61	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-405.62	734.82	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-454.35	739.25	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-3095.53	4929.99	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-2762.98	4900.64	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-2793.41	5060.52	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-3128.97	5091.04	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2252.72	1995.37	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2339.44	2110.6	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2243.33	2140.09	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2157.14	2004.15	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2000.58	1779.65	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2019.41	1813.72	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1930.5	1824.02	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1924.92	1798.61	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-243.05	218.43	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-234.14	208.15	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-224.22	209.16	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-233.5	221.21	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-350.93	315.29	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-338.51	301.01	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-324.15	302.47	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-337.16	319.27	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-413.49	705.16	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-328.23	652.51	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-357.4	690.24	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-442.27	742.86	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-2847.59	4856.24	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-2260.4	4493.65	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-2461.3	4753.52	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-3045.79	5115.85	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2242.97	1997.15	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2253	2021.04	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2154.12	2032.26	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2157.76	2018.8	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2150.23	2037.56	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-1860.42	1662.68	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1926.4	1811.41	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1923.34	1800.17	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-262.66	252.27	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-223.69	199.51	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-228.33	212.94	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-232.56	219.89	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-379.22	364.06	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-323.08	288.16	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-329.91	307.75	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-335.84	317.44	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-317.88	591.88	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-172.69	487.95	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-172.42	452.42	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-314.81	554.06	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-2189.17	4076.1	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-1189.24	3360.38	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-1187.43	3115.67	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-2168.01	3815.64	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2412.66	2289.41	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2083.67	1861.66	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2154.44	2023.92	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2155.54	2019.51	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1913.45	1659.7	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2066.86	1801.71	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1891.58	1743.7	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1837.16	1712.48	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-53.48	46.57	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-41.24	35.77	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-37.64	34.66	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-49.43	46.42	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-84.2	73.27	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-67.82	58.76	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-61.95	57.05	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-78.23	73.4	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1505.71	2364.7	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1414.48	1499.12	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1096.26	1070.45	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1102.03	1756.7	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-46.66	48.32	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-7.12	42.97	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
4.68	38.33	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-38.95	44	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-1966.23	1705.55	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2108.02	1836.89	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-1929.22	1778.35	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-1886.53	1758.8	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-3019.68	2930.9	0	0	1.268E-05	1.134E-05	-1.411E-05	-0.0009428	3.788E-05	0.0009436
-1517.05	1564.21	6.12E-06	0	1.234E-05	1.588E-05	-9.47E-06	-0.0009428	3.788E-05	0.0009436
-1602.46	1470.05	0	0	1.207E-05	1.225E-05	-1.19E-05	0	3.788E-05	3.788E-05
-3091.85	2837.67	0	0	1.241E-05	1.224E-05	-1.259E-05	0	3.788E-05	3.788E-05
-367.05	356.23	0	0	-7.412E-06	8.251E-06	-6.627E-06	0.0005512	-2.214E-05	0.0005516
-182.44	188.07	0	0	-7.212E-06	5.536E-06	-9.285E-06	0.0005512	-2.214E-05	0.0005516
-192.43	176.46	0	0	-7.058E-06	6.955E-06	-7.161E-06	0	-2.214E-05	2.214E-05
-375.51	344.76	0	0	-7.257E-06	7.36E-06	-7.155E-06	0	-2.214E-05	2.214E-05
-530.01	514.38	0	0	-1.035E-05	1.152E-05	-9.253E-06	0.0007696	-3.092E-05	0.0007702

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-263.51	271.65	0	0	-1.007E-05	7.73E-06	-1.296E-05	0.0007696	-3.092E-05	0.0007702
-277.95	254.89	0	0	-9.855E-06	9.711E-06	-9.999E-06	0	-3.092E-05	3.092E-05
-542.23	497.82	0	0	-1.013E-05	1.028E-05	-9.99E-06	0	-3.092E-05	3.092E-05
-0.54	342.44	-7.411E-05	-8.755E-06	0.0003782	0.0003382	-0.0004211	-0.03	0.00113	0.03
-46	168.6	0.0001826	8.755E-06	0.000368	0.0004738	-0.0002825	-0.03	0.00113	0.03
-8.15	133.44	0	8.755E-06	0.0003602	0.0003654	-0.0003549	0	0.00113	0.00113
34.08	318.09	0	-8.755E-06	0.0003703	0.0003651	-0.0003756	0	0.00113	0.00113
-3.73	2358.31	1.639E-05	0	-8.366E-05	9.313E-05	-7.481E-05	0.01	-0.0002499	0.01
-316.79	1161.09	-4.038E-05	0	-8.141E-05	6.249E-05	-0.0001048	0.01	-0.0002499	0.01
-56.1	918.97	0	0	-7.967E-05	7.851E-05	-8.083E-05	0	-0.0002499	0.0002499
234.7	2190.62	0	0	-8.192E-05	8.308E-05	-8.076E-05	0	-0.0002499	0.0002499
-3386.71	3287.1	0	0	5.267E-06	0	-5.863E-06	-0.0003917	1.573E-05	0.000392
-1699.46	1752.24	0	0	5.125E-06	6.598E-06	0	-0.0003917	1.573E-05	0.000392
-1794.87	1646.49	0	0	5.015E-06	5.089E-06	0	0	1.573E-05	1.573E-05
-3467.34	3182.4	0	0	5.157E-06	5.084E-06	-5.23E-06	0	1.573E-05	1.573E-05
-2396.28	2262.24	0	0	1.258E-05	1.089E-05	-1.45E-05	-0.0002882	0	0.0002882
-1702.82	1557.22	0	0	1.255E-05	1.453E-05	-1.083E-05	-0.0002882	0	0.0002882
-1943.51	1943.66	0	0	1.236E-05	1.241E-05	-1.231E-05	8.327E-06	0	8.37E-06
-2178.81	2007.45	0	0	1.238E-05	1.233E-05	-1.243E-05	8.327E-06	0	8.37E-06
-278.95	262.26	0	0	-7.351E-06	8.477E-06	-6.364E-06	0.0001685	0	0.0001685
-199.35	182.98	0	0	-7.339E-06	6.331E-06	-8.492E-06	0.0001685	0	0.0001685
-227.95	229	0	0	-7.226E-06	7.198E-06	-7.255E-06	0	0	0
-255.53	235.13	0	0	-7.238E-06	7.266E-06	-7.21E-06	0	0	0
-403.29	379.2	0	0	-1.026E-05	1.184E-05	-8.885E-06	0.0002352	0	0.0002352
-288.15	264.47	0	0	-1.025E-05	8.84E-06	-1.186E-05	0.0002352	0	0.0002352
-329.48	330.96	0	0	-1.009E-05	1.005E-05	-1.013E-05	-6.797E-06	0	6.832E-06
-369.34	339.87	0	0	-1.011E-05	1.015E-05	-1.007E-05	-6.797E-06	0	6.832E-06
-362.43	523.26	-0.0001054	0	0.0003751	0.0003247	-0.0004326	-0.01	2.539E-05	0.01
-310.52	338.72	0.0001079	0	0.0003745	0.0004333	-0.0003231	-0.01	2.539E-05	0.01
-220.95	219.04	0	0	0.0003688	0.0003702	-0.0003673	0.0002484	2.539E-05	0.0002497
-255.87	368.01	0	0	0.0003694	0.0003679	-0.0003708	0.0002484	2.539E-05	0.0002497
-1407.23	3101.08	2.332E-05	0	-8.298E-05	9.568E-05	-7.183E-05	0.001902	-5.615E-06	0.001902
-300.4	2007.43	-2.386E-05	0	-8.284E-05	7.147E-05	-9.585E-05	0.001902	-5.615E-06	0.001902
22.98	1298.15	0	0	-8.157E-05	8.125E-05	-8.189E-05	-5.494E-05	-5.615E-06	5.523E-05
-983.12	2181.02	0	0	-8.17E-05	8.202E-05	-8.138E-05	-5.494E-05	-5.615E-06	5.523E-05
-2675.19	2524.42	0	0	5.224E-06	0	-6.024E-06	-0.0001197	0	0.0001197
-1902.12	1740.13	0	0	5.215E-06	6.034E-06	0	-0.0001197	0	0.0001197
-2171.45	2172.64	0	0	5.135E-06	5.155E-06	-5.115E-06	0	0	0
-2434.3	2242.52	0	0	5.143E-06	5.123E-06	-5.164E-06	0	0	0
-2040.36	1807.9	0	0	1.257E-05	1.088E-05	-1.45E-05	-0.0002667	0	0.0002667
-2096.28	1885.37	0	0	1.255E-05	1.452E-05	-1.083E-05	-0.0002667	0	0.0002667
-1963.73	1857.03	0	0	1.237E-05	1.241E-05	-1.232E-05	8.165E-06	0	8.204E-06
-1975.01	1855.9	0	0	1.239E-05	1.234E-05	-1.243E-05	8.165E-06	0	8.204E-06
-238.72	210.79	0	0	-7.349E-06	8.477E-06	-6.361E-06	0.0001559	0	0.0001559
-249.71	226.03	0	0	-7.337E-06	6.329E-06	-8.491E-06	0.0001559	0	0.0001559

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-233.83	222.85	0	0	-7.229E-06	7.204E-06	-7.254E-06	0	0	0
-230.91	215.57	0	0	-7.241E-06	7.266E-06	-7.216E-06	0	0	0
-345.05	304.71	0	0	-1.026E-05	1.184E-05	-8.881E-06	0.0002177	0	0.0002177
-360.77	326.5	0	0	-1.024E-05	8.838E-06	-1.186E-05	0.0002177	0	0.0002177
-337.83	321.88	0	0	-1.009E-05	1.006E-05	-1.013E-05	-6.665E-06	0	6.696E-06
-333.78	311.66	0	0	-1.011E-05	1.014E-05	-1.007E-05	-6.665E-06	0	6.696E-06
-360.51	651.82	-0.0001059	0	0.000375	0.0003246	-0.0004326	-0.01	2.365E-05	0.01
-419.55	586.55	0.0001082	0	0.0003744	0.0004333	-0.000323	-0.01	2.365E-05	0.01
-461.14	679.19	0	0	0.0003689	0.0003702	-0.0003676	0.0002436	2.365E-05	0.0002447
-400.82	744.98	0	0	0.0003695	0.0003682	-0.0003708	0.0002436	2.365E-05	0.0002447
-2322.77	3863.03	2.342E-05	0	-8.295E-05	9.569E-05	-7.18E-05	0.00176	-5.232E-06	0.00176
-1485.72	3476.2	-2.393E-05	0	-8.282E-05	7.144E-05	-9.584E-05	0.00176	-5.232E-06	0.00176
-1889.36	4025.2	0	0	-8.159E-05	8.131E-05	-8.188E-05	-5.388E-05	-5.232E-06	5.413E-05
-2718.78	4415.09	0	0	-8.173E-05	8.201E-05	-8.145E-05	-5.388E-05	-5.232E-06	5.413E-05
-2278.9	2018.45	0	0	5.222E-06	0	-6.024E-06	-0.0001108	0	0.0001108
-2345.89	2111.22	0	0	5.214E-06	6.034E-06	0	-0.0001108	0	0.0001108
-2197.42	2079.65	0	0	5.137E-06	5.154E-06	-5.119E-06	0	0	0
-2205.74	2071.2	0	0	5.145E-06	5.127E-06	-5.163E-06	0	0	0
-2259.92	2018.46	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2032.45	1795	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1991.64	1896.15	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2085.63	1947.84	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-268.72	239.04	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-241.25	213.54	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-238.27	229.31	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-247.28	229.6	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-388.37	345.53	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-348.5	308.44	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-344.17	331.14	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-357.35	331.85	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-241.45	594.26	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-373.81	631.06	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-456.65	733.88	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-327.1	697.12	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-2581.18	3521.88	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-2102.67	3739.96	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-2310.6	4349.3	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-2805.73	4131.48	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2528.58	2257.41	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2273.58	2008.4	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2229.7	2125.1	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2332.69	2177.11	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1615.85	1457.84	0	0	1.253E-05	1.078E-05	-1.453E-05	-0.0002474	0	0.0002474
-2540.72	2429.4	0	0	1.259E-05	1.448E-05	-1.093E-05	-0.0002474	0	0.0002474
-2186.45	2005.98	0	0	1.241E-05	1.245E-05	-1.237E-05	7.933E-06	0	8.238E-06



Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2053.87	2162.3	0	0	1.235E-05	1.231E-05	-1.239E-05	7.933E-06	0	8.238E-06
-180	161.42	0	0	-7.322E-06	8.497E-06	-6.301E-06	0.0001446	0	0.0001446
-318.06	309.71	0	0	-7.359E-06	6.39E-06	-8.462E-06	0.0001446	0	0.0001446
-266.78	244.52	0	0	-7.255E-06	7.233E-06	-7.278E-06	0	0	0
-244.15	261.31	0	0	-7.219E-06	7.241E-06	-7.197E-06	0	0	0
-260.01	233.18	0	0	-1.022E-05	1.186E-05	-8.798E-06	0.0002019	0	0.0002019
-459.41	447.28	0	0	-1.027E-05	8.923E-06	-1.182E-05	0.0002019	0	0.0002019
-385.47	353.31	0	0	-1.013E-05	1.01E-05	-1.016E-05	-6.475E-06	0	6.724E-06
-352.77	377.61	0	0	-1.008E-05	1.011E-05	-1.005E-05	-6.475E-06	0	6.724E-06
-123.52	409.94	-0.0001102	0	0.0003737	0.0003215	-0.0004336	-0.01	-6.618E-05	0.01
-276.77	580.88	0.0001038	0	0.0003755	0.0004318	-0.0003261	-0.01	-6.618E-05	0.01
-132.5	309.84	0	0	0.0003702	0.0003714	-0.0003691	0.0002367	-6.618E-05	0.0002457
3.89	179.76	0	0	0.0003684	0.0003673	-0.0003695	0.0002367	-6.618E-05	0.0002457
-1979.3	2429.49	2.437E-05	0	-8.265E-05	9.591E-05	-7.112E-05	0.001632	1.464E-05	0.001632
-2315.71	3442.6	-2.297E-05	0	-8.306E-05	7.213E-05	-9.551E-05	0.001632	1.464E-05	0.001632
-1313.09	1836.29	0	0	-8.19E-05	8.165E-05	-8.215E-05	-5.235E-05	1.464E-05	5.436E-05
-1076.66	1065.33	0	0	-8.149E-05	8.174E-05	-8.124E-05	-5.235E-05	1.464E-05	5.436E-05
-1792.94	1615.59	0	0	5.203E-06	0	-6.038E-06	-0.0001028	0	0.0001028
-2858.62	2738.69	0	0	5.229E-06	6.013E-06	0	-0.0001028	0	0.0001028
-2452.42	2249.43	0	0	5.156E-06	5.171E-06	-5.14E-06	0	0	0
-2297.93	2423.4	0	0	5.13E-06	5.114E-06	-5.146E-06	0	0	0
-2459.84	2322.26	0	0	1.259E-05	1.093E-05	-1.448E-05	-0.0002474	0	0.0002474
-1632.47	1486.95	0	0	1.253E-05	1.453E-05	-1.078E-05	-0.0002474	0	0.0002474
-2027.14	2138.16	0	0	1.235E-05	1.239E-05	-1.231E-05	7.933E-06	0	8.238E-06
-2169.74	1990.66	0	0	1.241E-05	1.237E-05	-1.245E-05	7.933E-06	0	8.238E-06
-298.35	283.8	0	0	-7.359E-06	8.462E-06	-6.39E-06	0.0001446	0	0.0001446
-175.81	158.92	0	0	-7.322E-06	6.301E-06	-8.497E-06	0.0001446	0	0.0001446
-238.69	258.43	0	0	-7.219E-06	7.197E-06	-7.241E-06	0	0	0
-262.72	240.91	0	0	-7.255E-06	7.278E-06	-7.233E-06	0	0	0
-431.32	410.35	0	0	-1.027E-05	1.182E-05	-8.923E-06	0.0002019	0	0.0002019
-254.1	229.68	0	0	-1.022E-05	8.798E-06	-1.186E-05	0.0002019	0	0.0002019
-344.98	373.46	0	0	-1.008E-05	1.005E-05	-1.011E-05	-6.475E-06	0	6.724E-06
-379.69	348.16	0	0	-1.013E-05	1.016E-05	-1.01E-05	-6.475E-06	0	6.724E-06
-360.31	550.25	-0.0001038	0	0.0003755	0.0003261	-0.0004318	-0.01	6.618E-05	0.01
-313.72	390.02	0.0001102	0	0.0003737	0.0004336	-0.0003215	-0.01	6.618E-05	0.01
-168.63	164.69	0	0	0.0003684	0.0003695	-0.0003673	0.0002367	6.618E-05	0.0002457
-197.53	281.04	0	0	0.0003702	0.0003691	-0.0003714	0.0002367	6.618E-05	0.0002457
-1618.35	3261.07	2.297E-05	0	-8.306E-05	9.551E-05	-7.213E-05	0.001632	-1.464E-05	0.001632
-728.78	2311.46	-2.437E-05	0	-8.265E-05	7.112E-05	-9.591E-05	0.001632	-1.464E-05	0.001632
48.54	976.04	0	0	-8.149E-05	8.124E-05	-8.174E-05	-5.235E-05	-1.464E-05	5.436E-05
-736.16	1665.58	0	0	-8.19E-05	8.215E-05	-8.165E-05	-5.235E-05	-1.464E-05	5.436E-05
-2758.19	2606.02	0	0	5.229E-06	0	-6.013E-06	-0.0001028	0	0.0001028
-1807.35	1644.63	0	0	5.203E-06	6.038E-06	0	-0.0001028	0	0.0001028
-2265.62	2396.11	0	0	5.13E-06	5.146E-06	-5.114E-06	0	0	0
-2430.85	2229.45	0	0	5.156E-06	5.14E-06	-5.171E-06	0	0	0

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2794.12	2529.45	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-1889.27	1638.08	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2074.58	2066.64	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2219.15	2044.32	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-326.39	293.61	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-224.47	194.56	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-249.13	250.55	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-261.72	240.6	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-471.73	424.41	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-324.43	281.19	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-359.9	361.83	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-378.18	347.69	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-183.93	454.18	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-327.2	435.76	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-479.48	685.65	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-339.25	708.29	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-1975.66	2691.68	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-992.31	2582.5	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-1812.8	4063.52	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-2814.2	4197.65	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-3120.47	2822.95	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2113.43	1832.39	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2323.64	2317.07	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2480.74	2284.74	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1885.82	1694.91	0	0	1.236E-05	1.031E-05	-1.48E-05	-0.0001994	-7.452E-06	0.0001995
-3254.38	3308.39	0	0	1.265E-05	1.467E-05	-1.09E-05	-0.0001994	-7.452E-06	0.0001995
-2136.78	1962.9	0	0	1.249E-05	1.252E-05	-1.247E-05	7.415E-06	-7.452E-06	1.051E-05
-2961.33	3698.53	0	0	1.22E-05	1.218E-05	-1.222E-05	7.415E-06	-7.452E-06	1.051E-05
-222.4	198.75	0	0	-7.224E-06	8.65E-06	-6.025E-06	0.0001166	0	0.0001167
-391.47	401.02	0	0	-7.396E-06	6.371E-06	-8.578E-06	0.0001166	0	0.0001167
-253.37	233.03	0	0	-7.304E-06	7.291E-06	-7.318E-06	0	0	6.146E-06
-351.51	437.41	0	0	-7.132E-06	7.146E-06	-7.118E-06	0	0	6.146E-06
-321.41	287.27	0	0	-1.009E-05	1.208E-05	-8.413E-06	0.0001628	6.083E-06	0.0001629
-565.43	579.1	0	0	-1.033E-05	8.895E-06	-1.198E-05	0.0001628	6.083E-06	0.0001629
-366.11	336.71	0	0	-1.02E-05	1.018E-05	-1.022E-05	-6.053E-06	6.083E-06	8.581E-06
-507.9	632.08	0	0	-9.959E-06	9.978E-06	-9.939E-06	-6.053E-06	6.083E-06	8.581E-06
-102.21	385.56	-0.0001328	0	0.0003686	0.0003075	-0.0004414	-0.01	-0.0002223	0.01
-384.93	711.85	0.0001114	0	0.0003774	0.0004377	-0.0003251	-0.01	-0.0002223	0.01
-214.33	381.32	0	0	0.0003727	0.0003735	-0.000372	0.0002212	-0.0002223	0.0003136
27.9	142.21	0	0	0.000364	0.0003633	-0.0003647	0.0002212	-0.0002223	0.0003136
-1921.12	2285.01	2.937E-05	0	-8.154E-05	9.764E-05	-6.801E-05	0.001316	4.917E-05	0.001317
-2586.89	4218.74	-2.465E-05	0	-8.348E-05	7.191E-05	-9.682E-05	0.001316	4.917E-05	0.001317
-1338.97	2259.89	0	0	-8.245E-05	8.229E-05	-8.261E-05	-4.893E-05	4.917E-05	6.937E-05
-913.22	842.8	0	0	-8.051E-05	8.066E-05	-8.035E-05	-4.893E-05	4.917E-05	6.937E-05
-2108.18	1893.57	0	0	5.133E-06	0	-6.147E-06	-8.284E-05	0	8.289E-05

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-3645.83	3709.35	0	0	5.255E-06	6.095E-06	0	-8.284E-05	0	8.289E-05
-2390.09	2195.84	0	0	5.191E-06	5.2E-06	-5.181E-06	0	0	0
-3312.84	4135.94	0	0	5.068E-06	5.058E-06	-5.078E-06	0	0	0
-2211.15	2064.99	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-1913	1698.11	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1934.94	1812.85	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2012.77	1902.12	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-47.56	44.75	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-40.67	36.03	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-40.91	38.14	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-43.13	41.04	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-77.41	72.76	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-66.31	58.76	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-66.75	62.27	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-70.23	66.77	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1362.59	2477.62	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-741.06	2059.56	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-831.83	2063.62	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1442.91	2477.84	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-25.52	46.4	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-13.88	38.57	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-15.58	38.65	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-27.02	46.41	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2258.69	2109.71	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-1953.64	1734.11	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-1975.82	1850.96	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2055.87	1943.12	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2081.36	1873.93	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2019.34	1791.43	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1933.37	1800.27	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1995.03	1897.67	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-44.68	40.53	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-42.31	37.38	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-40.56	37.56	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-42.82	41.12	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-72.74	65.92	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-69.11	61.1	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-66.25	61.39	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-69.71	66.86	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1735.63	2815.18	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1390.17	2689.83	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1500.4	2877.61	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1845.86	3003.29	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-32.51	52.73	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-26.04	50.38	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-28.1	53.9	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-34.57	56.25	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2126.01	1914.42	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2061.61	1828.75	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-1973.89	1837.77	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2037.82	1938.74	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2551.15	2424.04	0	0	1.278E-05	1.127E-05	-1.444E-05	-0.0006843	3.693E-05	0.0006853
-1477.7	1424.13	6.495E-06	0	1.228E-05	1.604E-05	-9.316E-06	-0.0006843	3.693E-05	0.0006853
-1563.46	1452.8	0	0	1.198E-05	1.211E-05	-1.184E-05	8.625E-06	3.693E-05	3.793E-05
-2549.19	2337.27	0	0	1.247E-05	1.234E-05	-1.261E-05	8.625E-06	3.693E-05	3.793E-05
-54.65	51.97	0	0	-7.472E-06	8.444E-06	-6.586E-06	0.0004	-2.159E-05	0.0004006
-31.61	30.45	0	0	-7.181E-06	5.446E-06	-9.376E-06	0.0004	-2.159E-05	0.0004006
-33.34	30.94	0	0	-7.001E-06	6.922E-06	-7.081E-06	-5.042E-06	-2.159E-05	2.217E-05
-54.51	49.98	0	0	-7.293E-06	7.373E-06	-7.213E-06	-5.042E-06	-2.159E-05	2.217E-05
-89.01	84.63	0	0	-1.043E-05	1.179E-05	-9.196E-06	0.0005585	-3.015E-05	0.0005593
-51.49	49.6	-5.302E-06	0	-1.003E-05	7.604E-06	-1.309E-05	0.0005585	-3.015E-05	0.0005593
-54.34	50.43	0	0	-9.776E-06	9.664E-06	-9.887E-06	-7.04E-06	-3.015E-05	3.096E-05
-88.8	81.43	0	0	-1.018E-05	1.029E-05	-1.007E-05	-7.04E-06	-3.015E-05	3.096E-05
-245.95	1330.4	-8.8E-05	-6.795E-06	0.0003813	0.0003361	-0.0004309	-0.02	0.001102	0.02
-200.99	909.35	0.0001938	6.795E-06	0.0003664	0.0004785	-0.0002779	-0.02	0.001102	0.02
-15.23	617.85	0	6.795E-06	0.0003573	0.0003614	-0.0003532	0.0002573	0.001102	0.001131
-60.62	1040.39	0	-6.795E-06	0.0003722	0.0003681	-0.0003762	0.0002573	0.001102	0.001131
-4.61	24.92	1.947E-05	0	-8.435E-05	9.531E-05	-7.434E-05	0.004515	-0.0002437	0.004522
-3.76	17.03	-4.286E-05	0	-8.106E-05	6.147E-05	-0.0001058	0.004515	-0.0002437	0.004522
-0.29	11.57	0	0	-7.903E-05	7.813E-05	-7.993E-05	-5.692E-05	-0.0002437	0.0002503
-1.14	19.49	0	0	-8.232E-05	8.322E-05	-8.142E-05	-5.692E-05	-0.0002437	0.0002503
-2605.8	2476.01	0	0	5.31E-06	0	-6E-06	-0.0002843	1.534E-05	0.0002847
-1509.3	1454.57	0	0	5.103E-06	6.663E-06	0	-0.0002843	1.534E-05	0.0002847
-1596.79	1483.74	0	0	0	5.032E-06	0	0	1.534E-05	1.576E-05
-2603.69	2387.25	0	0	5.182E-06	5.126E-06	-5.239E-06	0	1.534E-05	1.576E-05
-2085.25	1872.41	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2027.34	1801.18	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1948.65	1823.04	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1987.35	1878.77	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-44.31	40.06	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-42.36	37.51	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-40.73	37.87	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-42.28	40.3	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-72.24	65.24	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-69.22	61.32	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-66.56	61.94	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-68.92	65.62	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1713.39	2302.37	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1461.64	2493.85	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1554.26	2847.08	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-1818.02	2655.6	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-32.09	43.12	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-27.38	46.71	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-29.11	53.32	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-34.05	49.74	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2129.53	1912.43	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2069.66	1838.64	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-1989.34	1860.85	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2029.6	1919.02	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1993.05	1801.57	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2123.77	1928.8	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2003.11	1871.75	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1987.43	1902.56	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-42.14	38.23	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-43.87	39.61	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-41.76	38.95	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-41.6	39.85	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-68.75	62.34	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-71.82	64.88	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-68.27	63.69	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-67.97	65.11	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1147.55	1547.92	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1708.57	2546.85	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-887.28	1084.01	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-510.55	468.48	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-21.49	28.99	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-32	47.7	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-16.62	20.3	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-9.56	8.77	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2035.17	1839.78	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2167.62	1968.38	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2044.86	1910.69	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2029.03	1942.41	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2184.87	1964.66	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-1938.86	1708.67	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1940.58	1837	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2001.39	1860.51	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-46.96	42.41	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-41.33	36.37	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-41.42	39.13	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-42.73	39.83	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-76.44	69	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-67.36	59.29	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-67.5	63.77	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-69.63	64.87	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-978.43	2066.5	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-169.66	1258.01	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
37.24	814.3	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-698.22	1469.28	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-18.33	38.7	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-3.18	23.56	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
0.7	15.25	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-13.08	27.52	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2231.82	2007.05	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-1980.18	1745.03	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-1982	1876.12	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2044.11	1900.33	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2012.95	1802.33	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2184	1992.84	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-1997.78	1854.4	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-2073.6	1994.41	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-43.23	38.84	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-45.68	41.3	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-42.07	38.9	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-44.46	43.09	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-70.38	63.2	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-74.64	67.57	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-68.68	63.53	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-72.4	70.09	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1336.01	2737.43	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1177.2	2841.09	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1209.67	2426.69	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1353.01	2313.43	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-25.02	51.27	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-22.05	53.21	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-22.66	45.45	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-25.34	43.33	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2056.14	1841.12	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2229.66	2034.09	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2039.83	1893.25	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-2118.05	2037.47	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-2076.02	1852.35	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2019.81	1786.2	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2029.33	1929.51	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1907.6	1762.38	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-44.51	40.05	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-42.19	37.19	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-42.31	39.91	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-40.57	37.68	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-72.47	65.13	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-68.94	60.8	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-69.16	65.31	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-66.13	61.37	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-2140.63	3208.24	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1778.11	3011.11	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1518.48	2826.81	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1890.87	3028.8	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-40.09	60.09	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-33.3	56.4	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-28.44	52.94	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-35.41	56.73	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-2120.48	1892.33	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2061.94	1823.32	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2071.6	1969.36	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-1948.12	1799.99	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1879.29	1666.04	0	0	1.256E-05	1.086E-05	-1.451E-05	-0.0002772	0	0.0002772
-2233.31	2074.07	0	0	1.256E-05	1.451E-05	-1.086E-05	-0.0002772	0	0.0002772
-2024.78	1901.69	0	0	1.237E-05	1.242E-05	-1.233E-05	8.257E-06	0	8.257E-06
-1914.55	1803.22	0	0	1.237E-05	1.233E-05	-1.242E-05	8.257E-06	0	8.257E-06
-39.51	35.14	0	0	-7.344E-06	8.485E-06	-6.346E-06	0.000162	0	0.000162
-46.35	42.77	0	0	-7.344E-06	6.346E-06	-8.485E-06	0.000162	0	0.000162
-42.25	39.46	0	0	-7.233E-06	7.207E-06	-7.26E-06	0	0	0
-40.51	38.41	0	0	-7.233E-06	7.26E-06	-7.207E-06	0	0	0
-64.51	57.34	0	0	-1.025E-05	1.185E-05	-8.86E-06	0.0002263	0	0.0002263
-75.83	70.03	0	0	-1.025E-05	8.86E-06	-1.185E-05	0.0002263	0	0.0002263
-69.06	64.54	0	0	-1.01E-05	1.006E-05	-1.014E-05	-6.74E-06	0	6.74E-06
-66.09	62.6	0	0	-1.01E-05	1.014E-05	-1.006E-05	-6.74E-06	0	6.74E-06
-1689.66	2165.96	-0.0001069	0	0.0003748	0.0003238	-0.000433	-0.01	0	0.01
-1549.56	2501.74	0.0001069	0	0.0003748	0.000433	-0.0003238	-0.01	0	0.01
-1448.42	2520.97	0	0	0.0003691	0.0003705	-0.0003678	0.0002463	0	0.0002463
-1602.76	2189.78	0	0	0.0003691	0.0003678	-0.0003705	0.0002463	0	0.0002463
-31.65	40.57	2.364E-05	0	-8.29E-05	9.577E-05	-7.163E-05	0.001829	0	0.001829
-29.02	46.86	-2.364E-05	0	-8.29E-05	7.163E-05	-9.577E-05	0.001829	0	0.001829
-27.13	47.22	0	0	-8.165E-05	8.135E-05	-8.195E-05	-5.449E-05	0	5.449E-05
-30.02	41.01	0	0	-8.165E-05	8.195E-05	-8.135E-05	-5.449E-05	0	5.449E-05
-1918.76	1701.14	0	0	5.219E-06	0	-6.029E-06	-0.0001151	0	0.0001151
-2279.64	2116.81	0	0	5.219E-06	6.029E-06	0	-0.0001151	0	0.0001151
-2067.01	1941.1	0	0	5.14E-06	5.159E-06	-5.121E-06	0	0	0
-1955.04	1841.59	0	0	5.14E-06	5.121E-06	-5.159E-06	0	0	0
-1470.36	1413.43	-6.495E-06	0	1.228E-05	9.316E-06	-1.604E-05	-0.0006843	-3.693E-05	0.0006853
-2528.12	2396.44	0	0	1.278E-05	1.444E-05	-1.127E-05	-0.0006843	-3.693E-05	0.0006853
-2528.88	2318.36	0	0	1.247E-05	1.261E-05	-1.234E-05	8.625E-06	-3.693E-05	3.793E-05
-1554.96	1445.49	0	0	1.198E-05	1.184E-05	-1.211E-05	8.625E-06	-3.693E-05	3.793E-05
-30.66	29.51	0	0	-7.181E-06	9.376E-06	-5.446E-06	0.0004	2.159E-05	0.0004006
-52.65	49.88	0	0	-7.472E-06	6.586E-06	-8.444E-06	0.0004	2.159E-05	0.0004006

**Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)**

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-52.77	48.37	0	0	-7.293E-06	7.213E-06	-7.373E-06	-5.042E-06	2.159E-05	2.217E-05
-32.53	30.29	0	0	-7.001E-06	7.081E-06	-6.922E-06	-5.042E-06	2.159E-05	2.217E-05
-50.13	48.24	5.302E-06	0	-1.003E-05	1.309E-05	-7.604E-06	0.0005585	3.015E-05	0.0005593
-86.08	81.57	0	0	-1.043E-05	9.196E-06	-1.179E-05	0.0005585	3.015E-05	0.0005593
-86.26	79.07	0	0	-1.018E-05	1.007E-05	-1.029E-05	-7.04E-06	3.015E-05	3.096E-05
-53.16	49.48	0	0	-9.776E-06	9.887E-06	-9.664E-06	-7.04E-06	3.015E-05	3.096E-05
-834.02	938.59	-0.0001938	-6.795E-06	0.0003664	0.0002779	-0.0004785	-0.02	-0.001102	0.02
-1202	1319.2	8.8E-05	6.795E-06	0.0003813	0.0004309	-0.0003361	-0.02	-0.001102	0.02
-1007.47	1034.07	0	6.795E-06	0.0003722	0.0003762	-0.0003681	0.0002573	-0.001102	0.001131
-636.55	647.5	0	-6.795E-06	0.0003573	0.0003532	-0.0003614	0.0002573	-0.001102	0.001131
-15.62	17.58	4.286E-05	0	-8.106E-05	0.0001058	-6.147E-05	0.004515	0.0002437	0.004522
-22.51	24.71	-1.947E-05	0	-8.435E-05	7.434E-05	-9.531E-05	0.004515	0.0002437	0.004522
-18.87	19.37	0	0	-8.232E-05	8.142E-05	-8.322E-05	-5.692E-05	0.0002437	0.0002503
-11.92	12.13	0	0	-7.903E-05	7.993E-05	-7.813E-05	-5.692E-05	0.0002437	0.0002503
-1501.02	1442.94	0	0	5.103E-06	0	-6.663E-06	-0.0002843	-1.534E-05	0.0002847
-2580.76	2446.31	0	0	5.31E-06	6E-06	0	-0.0002843	-1.534E-05	0.0002847
-2581.65	2366.73	0	0	5.182E-06	5.239E-06	-5.126E-06	0	-1.534E-05	1.576E-05
-1587.49	1475.77	0	0	0	0	-5.032E-06	0	-1.534E-05	1.576E-05
-1401.64	1288.95	-0.012	-0.009	0.0002111	-0.009	-0.012	-2.87	-0.23	2.87
-2618.15	2403.22	0.025	0.004	-0.002	0.025	0.004	-2.87	0.33	2.88
-2633.9	2421.03	-1.142E-05	-5.71E-05	0.0002077	0.0001747	-0.0002432	-0.11	0.33	0.35
-1499.93	1419.42	-0.0002597	-0.001	0.002	0.001	-0.003	-0.11	-0.23	0.26
-99.6	100.19	-0.003	-0.002	-0.0001785	-0.002	-0.003	-0.27	-0.16	0.31
-247.05	228.15	0.001	0.001	3.201E-05	0.001	0.001	-0.27	0.06	0.28
-240.78	221.18	-0.0001201	-0.001	9.857E-05	-0.0001007	-0.001	0.02	0.06	0.06
-84.17	79.52	0.0002304	0.001	-0.0001119	0.001	0.000217	0.02	-0.16	0.16
-145.26	144.75	-0.004	-0.003	-0.0002497	-0.002	-0.004	-0.39	-0.23	0.45
-359.35	331.69	0.001	0.001	3.679E-05	0.001	0.001	-0.39	0.08	0.4
-350.52	321.89	-0.0001688	-0.001	0.0001394	-0.0001411	-0.001	0.03	0.08	0.09
-123.73	116.15	0.0003223	0.002	-0.000147	0.002	0.0003058	0.03	-0.23	0.23
-329.53	1016.72	-0.016	-0.021	-0.004	-0.014	-0.023	0.64	-2.41	2.5
-1.14	945.11	-0.026	0.01	0.002	0.01	-0.026	0.64	0.59	0.87
26.18	976.72	-0.002	-0.01	0.003	-0.001	-0.011	0.37	0.59	0.7
-322.19	1074.04	0.004	0.019	-0.002	0.02	0.003	0.37	-2.41	2.44
-533.36	668.87	-0.01	-0.005	-0.001	-0.005	-0.01	-1.04	-0.44	1.13
-212.55	592.66	0.004	0.002	2.555E-05	0.004	0.002	-1.04	0.14	1.05
80.18	377.47	-0.0002859	-0.001	0.0002799	-0.000221	-0.001	0.05	0.14	0.15
-203.49	294.33	0.001	0.003	-0.0004144	0.003	0.0004565	0.05	-0.44	0.44
-1477.05	1355.41	-0.015	-0.011	3.257E-05	-0.011	-0.015	-3.14	-0.39	3.16
-2861.32	2626.22	0.026	0.005	-0.002	0.026	0.004	-3.14	0.39	3.16
-2869.44	2635.31	-0.0001316	-0.001	0.0003063	9.098E-06	-0.001	-0.09	0.39	0.4
-1564.35	1471.47	-2.925E-05	-0.0001463	0.002	0.002	-0.002	-0.09	-0.39	0.4
-2114.31	1870.35	0	-1.113E-05	8.625E-06	7.983E-06	-1.502E-05	0.001562	-0.0008359	0.001771
-2302.09	2053.23	0	-1.442E-05	8.156E-06	0	-1.824E-05	0.001562	-0.001064	0.00189
-2200.58	2020.89	0	0	6.12E-06	6.827E-06	-5.448E-06	0.0001756	-0.001064	0.001078



Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2047.7	1877.04	0	0	6.59E-06	7.506E-06	-5.727E-06	0.0001756	-0.0008359	0.0008541
-46.31	40.92	0	6.505E-06	-5.042E-06	8.781E-06	0	-0.0009131	0.0004886	0.001036
-50.37	44.89	0	8.431E-06	0	1.066E-05	0	-0.0009131	0.0006218	0.001105
-47.87	44.04	0	0	0	0	0	-0.0001027	0.0006218	0.0006302
-44.46	40.76	0	0	0	0	0	-0.0001027	0.0004886	0.0004993
-75.18	66.44	0	9.083E-06	-7.04E-06	1.226E-05	-6.516E-06	-0.001275	0.0006823	0.001446
-81.79	72.91	0	1.177E-05	-6.657E-06	1.489E-05	0	-0.001275	0.0008682	0.001542
-77.8	71.55	0	0	0	0	-5.573E-06	-0.0001433	0.0008682	0.00088
-72.27	66.24	0	0	-5.379E-06	0	-6.126E-06	-0.0001433	0.0006823	0.0006972
-126.98	3187.36	0.000122	-0.000332	0.0002573	0.0002381	-0.0004481	0.05	-0.02	0.05
176.78	2711.26	-2.473E-05	-0.0004303	0.0002433	8.922E-05	-0.001	0.05	-0.03	0.06
-614.41	2771.16	6.856E-06	3.428E-05	0.0001826	0.0002037	-0.0001625	0.01	-0.03	0.03
-901.39	3267.57	8.842E-06	4.421E-05	0.0001966	0.0002239	-0.0001709	0.01	-0.02	0.03
-2.38	59.7	-2.699E-05	7.343E-05	-5.692E-05	9.912E-05	-5.267E-05	-0.01	0.01	0.01
3.31	50.78	5.47E-06	9.517E-05	-5.382E-05	0.0001204	-1.974E-05	-0.01	0.01	0.01
-11.51	51.9	0	-7.583E-06	-4.039E-05	3.595E-05	-4.505E-05	-0.001159	0.01	0.01
-16.88	61.2	0	-9.779E-06	-4.348E-05	3.779E-05	-4.953E-05	-0.001159	0.01	0.01
-2160.57	1911.22	0	0	0	0	-6.24E-06	0.0006488	-0.0003472	0.0007359
-2352.44	2098.09	0	-5.991E-06	0	0	-7.578E-06	0.0006488	-0.0004419	0.000785
-2248.43	2064.89	0	0	0	0	0	7.295E-05	-0.0004419	0.0004479
-2092.11	1917.73	0	0	0	0	0	7.295E-05	-0.0003472	0.0003548
-1868.13	1621.55	1.099E-05	6.99E-06	1.327E-05	2.24E-05	0	0.001461	0.0009043	0.001718
-2277.94	2016.72	0	-1.106E-05	1.158E-05	1.06E-05	-1.725E-05	0.001461	-0.0007053	0.001622
-2046.96	1876.08	0	0	5.75E-06	6.67E-06	0	0.0003598	-0.0007053	0.0007918
-1436.15	1390.58	0	0	7.439E-06	6.627E-06	-8.293E-06	0.0003598	0.0009043	0.0009733
-41.57	36.06	-6.424E-06	0	-7.755E-06	0	-1.31E-05	-0.0008539	-0.0005286	0.001004
-49.67	43.73	0	6.468E-06	-6.767E-06	1.009E-05	-6.194E-06	-0.0008539	0.0004123	0.0009483
-44.51	40.81	0	0	0	0	0	-0.0002104	0.0004123	0.0004629
-30.29	29.8	0	0	0	0	0	-0.0002104	-0.0005286	0.000569
-67.35	58.37	-8.97E-06	-5.705E-06	-1.083E-05	0	-1.829E-05	-0.001192	-0.0007381	0.001402
-80.59	71.04	0	9.031E-06	-9.449E-06	1.408E-05	-8.648E-06	-0.001192	0.0005757	0.001324
-72.33	66.32	0	0	0	0	-5.444E-06	-0.0002937	0.0005757	0.0006463
-49.44	48.51	0	0	-6.072E-06	6.769E-06	-5.409E-06	-0.0002937	-0.0007381	0.0007944
-4150.4	5987.94	0.0003278	0.0002085	0.0003957	0.001	-0.000132	0.04	0.03	0.05
-3075.82	6852.95	0.0001315	-0.0003301	0.0003453	0.0003161	-0.001	0.04	-0.02	0.05
-1024.45	3472.78	8.842E-06	4.421E-05	0.0001715	0.000199	-0.0001459	0.01	-0.02	0.02
-2100.18	2583.21	-8.283E-06	-4.142E-05	0.0002219	0.0001977	-0.0002474	0.01	0.03	0.03
-77.73	112.15	-7.252E-05	-4.612E-05	-8.753E-05	2.92E-05	-0.0001478	-0.01	-0.01	0.01
-57.61	128.35	-2.909E-05	7.301E-05	-7.639E-05	0.0001138	-6.991E-05	-0.01	0.004654	0.01
-19.19	65.04	0	-9.779E-06	-3.794E-05	3.228E-05	-4.401E-05	-0.002374	0.004654	0.01
-39.33	48.38	0	9.161E-06	-4.909E-05	5.472E-05	-4.373E-05	-0.002374	-0.01	0.01
-1909.68	1657.32	0	0	5.51E-06	9.307E-06	0	0.0006068	0.0003757	0.0007137
-2327.02	2060.12	0	0	0	0	-7.166E-06	0.0006068	-0.000293	0.0006738
-2091.41	1916.81	0	0	0	0	0	0.0001495	-0.000293	0.0003289
-1466.41	1420.3	0	0	0	0	0	0.0001495	0.0003757	0.0004043

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2624.27	2692.91	0	0	1.299E-05	1.474E-05	-1.125E-05	-0.000218	0.0001708	0.000277
-1272.33	1306.3	0	5.695E-06	1.193E-05	1.705E-05	-6.836E-06	-0.000218	0.0006158	0.0006533
-1445.18	1403.64	0	0	1.211E-05	1.129E-05	-1.296E-05	1.422E-05	0.0006158	0.000616
-2367.88	2178.21	0	0	1.317E-05	1.362E-05	-1.274E-05	1.422E-05	0.0001708	0.0001714
-54.61	55.87	0	0	-7.594E-06	6.576E-06	-8.616E-06	0.0001274	-9.986E-05	0.0001619
-25.38	26.3	0	0	-6.972E-06	0	-9.965E-06	0.0001274	-0.00036	0.0003819
-30.65	30.32	0	0	-7.079E-06	7.574E-06	-6.6E-06	-8.312E-06	-0.00036	0.0003601
-50.1	46	0	0	-7.701E-06	7.446E-06	-7.96E-06	-8.312E-06	-9.986E-05	0.0001002
-89.3	91.39	0	0	-1.06E-05	9.182E-06	-1.203E-05	0.0001779	-0.0001394	0.0002261
-41.75	43.2	0	0	-9.735E-06	5.58E-06	-1.391E-05	0.0001779	-0.0005026	0.0005332
-49.98	49.31	0	0	-9.884E-06	1.057E-05	-9.215E-06	-1.161E-05	-0.0005026	0.0005028
-81.73	75.05	0	0	-1.075E-05	1.04E-05	-1.111E-05	-1.161E-05	-0.0001394	0.0001399
-2130.24	3206.91	4.345E-05	6.063E-05	0.0003875	0.0004397	-0.0003356	-0.01	0.01	0.01
-3004.69	3388.53	0.0001347	0.0001699	0.0003558	0.001	-0.0002039	-0.01	0.02	0.02
-2351.3	3005.86	-8.283E-06	-4.142E-05	0.0003612	0.0003368	-0.0003865	0.0004242	0.02	0.02
-1362.54	2757.47	0	2.189E-05	0.000393	0.0004062	-0.00038	0.0004242	0.01	0.01
-39.9	60.06	-9.611E-06	-1.341E-05	-8.572E-05	7.423E-05	-9.725E-05	0.001438	-0.001127	0.001827
-56.28	63.46	-2.979E-05	-3.758E-05	-7.87E-05	4.511E-05	-0.0001125	0.001438	-0.004063	0.004311
-44.04	56.3	0	9.161E-06	-7.991E-05	8.549E-05	-7.449E-05	-9.382E-05	-0.004063	0.004065
-25.52	51.65	0	0	-8.693E-05	8.404E-05	-8.985E-05	-9.382E-05	-0.001127	0.001131
-2678.85	2748.74	0	0	5.396E-06	6.122E-06	0	-9.056E-05	7.096E-05	0.000115
-1297.65	1332.51	0	0	0	7.081E-06	0	-9.056E-05	0.0002558	0.0002714
-1475.78	1433.88	0	0	5.03E-06	0	-5.382E-06	5.906E-06	0.0002558	0.0002559
-2417.94	2224.16	0	0	5.472E-06	5.657E-06	-5.291E-06	5.906E-06	7.096E-05	7.121E-05
-3403.52	3841.88	0	0	0	0	0	-0.001038	0.004591	0.004707
-5318.95	5312.65	0	0	0	0	0	-0.001038	0.0005795	0.001189
-5580.73	5053.94	0	-9.579E-06	0	0	-1.107E-05	-0.0005119	0.0005795	0.0007732
-3750.83	3546.5	0	-2.895E-05	0	0	-2.936E-05	-0.0005119	0.004591	0.004619
-76.07	85.25	0	0	0	0	0	0.0006069	-0.002684	0.002752
-110.94	111.21	0	0	0	0	0	0.0006069	-0.0003388	0.000695
-116.72	105.54	0	5.6E-06	0	6.47E-06	0	0.0002993	-0.0003388	0.000452
-83.72	78.95	0	1.692E-05	0	1.716E-05	0	0.0002993	-0.002684	0.0027
-123.18	138.18	0	0	0	0	0	0.0008473	-0.003747	0.003842
-181.35	181.71	0	0	0	0	0	0.0008473	-0.000473	0.0009704
-190.74	172.51	0	7.819E-06	0	9.034E-06	0	0.0004178	-0.000473	0.0006311
-135.6	127.92	0	2.363E-05	0	2.397E-05	0	0.0004178	-0.003747	0.00377
44.56	5204.46	1.948E-05	0.0001299	-2.542E-05	0.0001355	1.391E-05	-0.03	0.14	0.14
-2475.97	2331.1	6.292E-05	-0.0001299	-7.991E-06	6.326E-05	-0.0001302	-0.03	0.02	0.04
-2002.17	2566.34	0	-0.0002858	0.0001219	4.861E-05	-0.0003302	-0.02	0.02	0.02
1337.97	5086.18	1.566E-05	-0.001	0.0001045	2.79E-05	-0.001	-0.02	0.14	0.14
0.83	97.48	0	-2.873E-05	5.622E-06	0	-2.996E-05	0.01	-0.03	0.03
-46.37	43.66	-1.392E-05	2.873E-05	0	2.88E-05	-1.399E-05	0.01	-0.003824	0.01
-37.5	48.07	0	6.321E-05	-2.696E-05	7.304E-05	-1.075E-05	0.003378	-0.003824	0.01
25.06	95.26	0	0.000191	-2.311E-05	0.0001937	-6.172E-06	0.003378	-0.03	0.03
-3479.59	3927.13	0	0	0	0	0	-0.0004312	0.001907	0.001955

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-5429.88	5423.85	0	0	0	0	0	-0.0004312	0.0002407	0.0004939
-5697.44	5159.47	0	0	0	0	0	-0.0002127	0.0002407	0.0003212
-3834.55	3625.45	0	-1.203E-05	0	0	-1.22E-05	-0.0002127	0.001907	0.001919
-4216.98	4505.95	-9.275E-06	0	1.136E-05	7.666E-06	-1.689E-05	-0.001553	-0.0001022	0.001556
-2304.11	2140.86	1.358E-05	0	1.141E-05	2.006E-05	-6.526E-06	-0.001553	-0.001189	0.001956
-3355.03	4511.96	5.027E-06	8.252E-06	1.162E-05	1.837E-05	-5.088E-06	-0.0002842	-0.001189	0.001223
-2577.67	2573.42	0	0	1.156E-05	1.253E-05	-1.06E-05	-0.0002842	-0.0001022	0.000302
-91.6	98.38	5.422E-06	0	-6.641E-06	9.875E-06	0	0.0009077	5.975E-05	0.0009096
-45.96	42.31	-7.939E-06	0	-6.672E-06	0	-1.173E-05	0.0009077	0.0006952	0.001143
-68.04	92.46	0	0	-6.791E-06	0	-1.074E-05	0.0001661	0.0006952	0.0007148
-56.43	56.94	0	0	-6.759E-06	6.195E-06	-7.326E-06	0.0001661	5.975E-05	0.0001766
-148.9	159.82	7.57E-06	0	-9.273E-06	1.379E-05	-6.257E-06	0.001267	8.343E-05	0.00127
-75.61	69.71	-1.109E-05	0	-9.316E-06	5.327E-06	-1.637E-05	0.001267	0.0009707	0.001596
-111.67	151.53	0	-6.736E-06	-9.482E-06	0	-1.499E-05	0.000232	0.0009707	0.000998
-91.63	92.32	0	0	-9.438E-06	8.65E-06	-1.023E-05	0.000232	8.343E-05	0.0002465
-1479.55	4101.4	-0.0002767	0	0.0003389	0.0002287	-0.001	-0.05	-0.003049	0.05
-3414.3	3904.78	0.0004051	0	0.0003405	0.001	-0.0001947	-0.05	-0.04	0.06
-3563.12	3729.59	0.00015	0.0002462	0.0003465	0.001	-0.0001518	-0.01	-0.04	0.04
-1780.95	3980.37	3.572E-05	2.201E-05	0.0003449	0.0003739	-0.0003161	-0.01	-0.003049	0.01
-27.71	76.82	6.12E-05	0	-7.496E-05	0.0001115	-5.058E-05	0.01	0.0006744	0.01
-63.95	73.13	-8.961E-05	0	-7.531E-05	4.306E-05	-0.0001324	0.01	0.01	0.01
-66.73	69.85	-3.317E-05	-5.445E-05	-7.665E-05	3.357E-05	-0.0001212	0.001875	0.01	0.01
-33.36	74.55	-7.902E-06	0	-7.63E-05	6.993E-05	-8.27E-05	0.001875	0.0006744	0.001993
-4308.58	4604.34	0	0	0	0	-7.018E-06	-0.000645	-4.246E-05	0.0006464
-2350.07	2183.16	5.642E-06	0	0	8.333E-06	0	-0.000645	-0.000494	0.0008124
-3423.07	4604.42	0	0	0	7.63E-06	0	-0.0001181	-0.000494	0.0005079
-2634.08	2630.33	0	0	0	5.206E-06	0	-0.0001181	-4.246E-05	0.0001255
-1446.43	1728.96	0	0	1.015E-05	1.332E-05	-7.006E-06	0.0007411	0.0004265	0.0008551
-664.1	978.74	0	0	1.031E-05	7.96E-06	-1.269E-05	0.0007411	-0.0002691	0.0007884
-737.09	685.65	0	0	9.491E-06	9.791E-06	-9.196E-06	7.287E-05	-0.0002691	0.0002788
-1519.86	1468.31	0	0	9.334E-06	9.184E-06	-9.485E-06	7.287E-05	0.0004265	0.0004327
-32.82	38.33	0	0	-5.932E-06	0	-7.79E-06	-0.0004332	-0.0002493	0.0004999
-15.9	22.47	0	0	-6.024E-06	7.416E-06	0	-0.0004332	0.0001573	0.0004609
-16.56	15.91	0	0	-5.548E-06	5.376E-06	-5.724E-06	-4.26E-05	0.0001573	0.000163
-33.48	32.57	0	0	-5.457E-06	5.545E-06	-5.369E-06	-4.26E-05	-0.0002493	0.000253
-53.04	62.12	0	0	-8.283E-06	5.718E-06	-1.088E-05	-0.0006049	-0.0003481	0.0006979
-25.46	36.15	0	0	-8.411E-06	1.035E-05	-6.498E-06	-0.0006049	0.0002197	0.0006435
-26.76	25.57	0	0	-7.747E-06	7.506E-06	-7.992E-06	-5.948E-05	0.0002197	0.0002276
-54.32	52.79	0	0	-7.619E-06	7.742E-06	-7.496E-06	-5.948E-05	-0.0003481	0.0003532
-344.68	4120.27	7.652E-05	0.000112	0.0003027	0.0003975	-0.000209	0.02	0.01	0.03
-2502.79	6369.32	-8.846E-05	-5.249E-05	0.0003074	0.0002375	-0.0003784	0.02	-0.01	0.02
-2715.9	4588.28	0	1.48E-05	0.0002831	0.0002921	-0.0002743	0.002174	-0.01	0.01
-686.25	2329.61	0	-7.493E-06	0.0002784	0.000274	-0.000283	0.002174	0.01	0.01
-6.46	77.17	-1.693E-05	-2.477E-05	-6.696E-05	4.623E-05	-8.793E-05	-0.00489	-0.002814	0.01
-46.88	119.29	1.957E-05	1.161E-05	-6.8E-05	8.37E-05	-5.253E-05	-0.00489	0.001776	0.01

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-50.87	85.93	0	0	-6.263E-05	6.068E-05	-6.461E-05	-0.0004808	0.001776	0.00184
-12.85	43.63	0	0	-6.159E-05	6.259E-05	-6.06E-05	-0.0004808	-0.002814	0.002855
-1479.2	1767.19	0	0	0	5.535E-06	0	0.0003078	0.0001772	0.0003552
-679.69	1000.68	0	0	0	0	-5.27E-06	0.0003078	-0.0001118	0.0003275
-753.4	701.18	0	0	0	0	0	3.027E-05	-0.0001118	0.0001158
-1553.34	1500.86	0	0	0	0	0	3.027E-05	0.0001772	0.0001797
-3070.15	3085.79	0	0	9.942E-06	1.075E-05	-9.946E-06	-0.0005511	0.0003094	0.000632
-2395.92	2284.09	0	0	1.023E-05	1.332E-05	-7.181E-06	-0.0005511	0.0004079	0.0006857
-1947.76	2125.11	0	0	1.002E-05	9.869E-06	-1.017E-05	3.369E-05	0.0004079	0.0004093
-2615.59	2952.83	0	0	9.732E-06	9.846E-06	-9.619E-06	3.369E-05	0.0003094	0.0003112
-66.57	66.54	0	0	-5.812E-06	5.814E-06	-6.286E-06	0.0003222	-0.0001808	0.0003695
-53.25	50.29	0	0	-5.98E-06	0	-7.786E-06	0.0003222	-0.0002385	0.0004008
-42.42	46.33	0	0	-5.857E-06	5.945E-06	-5.769E-06	-1.969E-05	-0.0002385	0.0002393
-55.51	63.21	0	0	-5.689E-06	5.623E-06	-5.756E-06	-1.969E-05	-0.0001808	0.0001819
-108.24	108.26	0	0	-8.115E-06	8.118E-06	-8.776E-06	0.0004498	-0.0002525	0.0005159
-86.3	81.6	0	0	-8.349E-06	5.862E-06	-1.087E-05	0.0004498	-0.000333	0.0005597
-68.93	75.28	0	0	-8.178E-06	8.301E-06	-8.055E-06	-2.749E-05	-0.000333	0.0003341
-90.52	102.96	0	0	-7.944E-06	7.851E-06	-8.036E-06	-2.749E-05	-0.0002525	0.000254
-298.84	3523.85	-7.368E-05	9.775E-05	0.0002966	0.0003208	-0.0002967	-0.02	0.01	0.02
1272.08	3381.09	7.198E-05	0.0001111	0.0003051	0.0003973	-0.0002142	-0.02	0.01	0.02
-373.81	1813.02	0	-7.493E-06	0.0002989	0.0002944	-0.0003034	0.001005	0.01	0.01
-1370.95	1717.44	0	5.634E-06	0.0002903	0.0002937	-0.000287	0.001005	0.01	0.01
-5.6	66	1.63E-05	-2.162E-05	-6.56E-05	6.563E-05	-7.095E-05	0.003637	-0.002041	0.00417
23.83	63.33	-1.592E-05	-2.457E-05	-6.749E-05	4.739E-05	-8.788E-05	0.003637	-0.002692	0.004524
-7	33.96	0	0	-6.611E-05	6.711E-05	-6.512E-05	-0.0002223	-0.002692	0.002701
-25.68	32.17	0	0	-6.422E-05	6.347E-05	-6.497E-05	-0.0002223	-0.002041	0.002053
-3136.69	3152.28	0	0	0	0	0	-0.0002289	0.0001285	0.0002625
-2449.16	2334.35	0	0	0	5.532E-06	0	-0.0002289	0.0001695	0.0002848
-1990.18	2171.44	0	0	0	0	0	1.399E-05	0.0001695	0.00017
-2671.1	3016.03	0	0	0	0	0	1.399E-05	0.0001285	0.0001293
-4313.13	4488.86	0	5.739E-06	9.227E-06	1.302E-05	-5.955E-06	0.001557	0.0005104	0.001639
-3382.49	4000.45	0	0	9.566E-06	9.782E-06	-1.051E-05	0.001557	0.0002179	0.001572
-2229.24	2335.74	0	0	8.609E-06	8.723E-06	-8.497E-06	0.0001112	0.0002179	0.0002446
-3354.88	3213.18	0	0	8.271E-06	8.437E-06	-8.107E-06	0.0001112	0.0005104	0.0005224
-93.1	96.82	0	0	-5.394E-06	0	-7.611E-06	-0.0009103	-0.0002984	0.000958
-72.97	86.52	0	0	-5.592E-06	6.146E-06	-5.718E-06	-0.0009103	-0.0001274	0.0009192
-47.05	49.64	0	0	-5.033E-06	0	-5.099E-06	-6.498E-05	-0.0001274	0.000143
-71.57	68.61	0	0	0	0	0	-6.498E-05	-0.0002984	0.0003054
-151.48	157.53	0	0	-7.532E-06	0	-1.063E-05	-0.001271	-0.0004166	0.001338
-118.73	140.73	0	0	-7.808E-06	8.581E-06	-7.984E-06	-0.001271	-0.0001779	0.001283
-76.78	80.94	0	0	-7.027E-06	6.935E-06	-7.12E-06	-9.073E-05	-0.0001779	0.0001997
-116.63	111.79	0	0	-6.751E-06	6.617E-06	-6.886E-06	-9.073E-05	-0.0004166	0.0004264
-385.33	3083.77	3.957E-05	0.0001712	0.0002753	0.0003884	-0.0001776	0.05	0.02	0.05
-1444.95	3333.53	-0.0001119	9.01E-05	0.0002854	0.0002918	-0.0003136	0.05	0.01	0.05
-1068.16	1214.39	0	5.634E-06	0.0002568	0.0002602	-0.0002535	0.003316	0.01	0.01

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-176.8	1026.58	0	8.193E-06	0.0002467	0.0002517	-0.0002418	0.003316	0.02	0.02
-7.22	57.76	-8.753E-06	-3.787E-05	-6.089E-05	3.929E-05	-8.591E-05	-0.01	-0.003368	0.01
-27.06	62.43	2.476E-05	-1.993E-05	-6.312E-05	6.937E-05	-6.454E-05	-0.01	-0.001438	0.01
-20.01	22.74	0	0	-5.681E-05	5.606E-05	-5.756E-05	-0.0007335	-0.001438	0.001614
-3.31	19.23	0	0	-5.458E-05	5.349E-05	-5.567E-05	-0.0007335	-0.003368	0.003447
-4406.23	4585.67	0	0	0	5.409E-06	0	0.0006469	0.000212	0.0006807
-3455.45	4086.96	0	0	0	0	0	0.0006469	9.052E-05	0.0006532
-2276.29	2385.38	0	0	0	0	0	4.618E-05	9.052E-05	0.0001016
-3426.45	3281.79	0	0	0	0	0	4.618E-05	0.000212	0.000217
-3378.38	3164.23	0	9.494E-06	8.917E-06	1.471E-05	-5.741E-06	-5.769E-05	0.001069	0.001071
-3291.67	3168.5	0	5.55E-06	9.245E-06	1.257E-05	-6.631E-06	-5.769E-05	0.0005134	0.0005166
-3314.4	3155.79	0	0	7.95E-06	8.116E-06	-7.786E-06	9.68E-05	0.0005134	0.0005224
-3397.58	3151.25	0	0	7.622E-06	7.158E-06	-8.1E-06	9.68E-05	0.001069	0.001074
-71.97	67.21	0	-5.55E-06	-5.213E-06	0	-8.601E-06	3.373E-05	-0.0006251	0.000626
-70.39	67.59	0	0	-5.405E-06	0	-7.346E-06	3.373E-05	-0.0003001	0.000302
-70.73	67.42	0	0	0	0	0	-5.659E-05	-0.0003001	0.0003054
-72.25	67.03	0	0	0	0	0	-5.659E-05	-0.0006251	0.0006276
-117.3	109.59	0	-7.749E-06	-7.279E-06	0	-1.201E-05	4.709E-05	-0.0008728	0.000874
-114.67	110.15	0	0	-7.546E-06	5.413E-06	-1.026E-05	4.709E-05	-0.000419	0.0004217
-115.26	109.85	0	0	-6.489E-06	6.355E-06	-6.624E-06	-7.901E-05	-0.000419	0.0004264
-117.79	109.28	0	0	-6.222E-06	6.611E-06	-5.843E-06	-7.901E-05	-0.0008728	0.0008763
545.94	848.46	-1.557E-05	0.0002832	0.000266	0.0004389	-0.0001713	-0.001721	0.03	0.03
295.55	1219.45	1.149E-05	0.0001656	0.0002758	0.0003749	-0.0001978	-0.001721	0.02	0.02
-229.53	1112.1	0	8.193E-06	0.0002372	0.0002421	-0.0002323	0.002888	0.02	0.02
6.11	628.57	0	-2.341E-05	0.0002274	0.0002135	-0.0002416	0.002888	0.03	0.03
10.23	15.89	0	-6.265E-05	-5.884E-05	3.788E-05	-9.709E-05	0.0003807	-0.01	0.01
5.54	22.84	0	-3.662E-05	-6.1E-05	4.376E-05	-8.292E-05	0.0003807	-0.003388	0.003409
-4.3	20.83	0	0	-5.246E-05	5.138E-05	-5.355E-05	-0.0006387	-0.003388	0.003447
0.11	11.77	0	5.179E-06	-5.03E-05	5.345E-05	-4.723E-05	-0.0006387	-0.01	0.01
-3450.35	3231.43	0	0	0	6.112E-06	0	-2.397E-05	0.0004442	0.0004448
-3362.06	3236.09	0	0	0	5.22E-06	0	-2.397E-05	0.0002133	0.0002146
-3385.13	3223.22	0	0	0	0	0	4.021E-05	0.0002133	0.000217
-3469.83	3218.28	0	0	0	0	0	4.021E-05	0.0004442	0.000446
279.6	1190.14	0	-1.493E-05	9.018E-06	6.552E-06	-1.872E-05	0.0001005	-0.004873	0.004874
-2792.39	2640.77	0	0	6.869E-06	7.297E-06	-7.302E-06	0.0001005	-0.000959	0.0009642
-3107.86	2703.54	0	6.708E-06	8.675E-06	1.373E-05	0	-0.001167	-0.000959	0.00151
-1060.17	2106.39	0	0	1.082E-05	1.141E-05	-1.093E-05	-0.001167	-0.004873	0.01
6.33	28.77	0	8.73E-06	-5.272E-06	1.094E-05	0	-5.873E-05	0.002849	0.002849
-63.61	59.88	0	0	0	0	0	-5.873E-05	0.0005606	0.0005637
-71.37	62.03	0	0	-5.071E-06	0	-8.025E-06	0.0006821	0.0005606	0.0008829
-23.8	48.18	0	0	-6.327E-06	6.39E-06	-6.671E-06	0.0006821	0.002849	0.002929
10.24	46.13	0	1.219E-05	-7.361E-06	1.528E-05	-5.348E-06	-8.2E-05	0.003977	0.003978
-102.74	96.77	0	0	-5.607E-06	5.96E-06	-5.956E-06	-8.2E-05	0.0007828	0.000787
-115.16	100.1	0	-5.475E-06	-7.081E-06	0	-1.121E-05	0.0009524	0.0007828	0.001233
-38.51	77.77	0	0	-8.834E-06	8.922E-06	-9.314E-06	0.0009524	0.003977	0.00409

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-4916.72	4715.67	8.254E-05	-0.0004455	0.000269	0.0001955	-0.001	0.002997	-0.15	0.15
701.47	6321.24	-7.372E-05	7.358E-05	0.0002049	0.0002177	-0.0002178	0.002997	-0.03	0.03
3582.2	6379.03	8.979E-05	0.0002001	0.0002588	0.0004095	-0.0001197	-0.03	-0.03	0.05
-4121.81	5694.77	-7.53E-05	8.964E-05	0.0003229	0.0003404	-0.0003261	-0.03	-0.15	0.15
-92.09	88.32	-1.826E-05	9.854E-05	-5.95E-05	0.0001235	-4.323E-05	-0.0006629	0.03	0.03
13.14	118.39	1.631E-05	-1.628E-05	-4.533E-05	4.818E-05	-4.815E-05	-0.0006629	0.01	0.01
67.09	119.47	-1.986E-05	-4.426E-05	-5.724E-05	2.647E-05	-9.059E-05	0.01	0.01	0.01
-77.2	106.66	1.666E-05	-1.983E-05	-7.142E-05	7.212E-05	-7.53E-05	0.01	0.03	0.03
285.95	1218.9	0	-6.204E-06	0	0	-7.776E-06	4.173E-05	-0.002024	0.002025
-2855.94	2700.58	0	0	0	0	0	4.173E-05	-0.0003984	0.0004006
-3179.22	2765.55	0	0	0	5.703E-06	0	-0.0004847	-0.0003984	0.0006274
-1083.92	2154.49	0	0	0	0	0	-0.0004847	-0.002024	0.002081
-10565.09	10009.24	-9.653E-06	2.208E-05	2.028E-05	3.196E-05	-1.954E-05	-0.003037	0.01	0.01
-6465.68	8663.36	9.363E-06	-1.361E-05	1.983E-05	2.079E-05	-2.504E-05	-0.003037	-0.004545	0.01
-1148.33	2894.07	0	0	1.144E-05	1.137E-05	-1.243E-05	0.003791	-0.004545	0.01
-6688.61	6242.34	0	0	1.19E-05	1.48E-05	-9.235E-06	0.003791	0.01	0.01
-232.09	220.42	5.643E-06	-1.29E-05	-1.186E-05	1.142E-05	-1.868E-05	0.001775	-0.003013	0.003498
-141.91	192.36	-5.474E-06	7.959E-06	-1.159E-05	1.464E-05	-1.215E-05	0.001775	0.002657	0.003195
-24.49	64.45	0	0	-6.688E-06	7.266E-06	-6.647E-06	-0.002216	0.002657	0.00346
-145.69	135.67	0	0	-6.955E-06	5.399E-06	-8.653E-06	-0.002216	-0.003013	0.003741
-376.71	357.64	7.879E-06	-1.802E-05	-1.656E-05	1.595E-05	-2.609E-05	0.002479	-0.004208	0.004883
-230.37	311.78	-7.643E-06	1.111E-05	-1.618E-05	2.044E-05	-1.697E-05	0.002479	0.003709	0.004462
-39.91	104.41	0	0	-9.337E-06	1.014E-05	-9.282E-06	-0.003095	0.003709	0.004831
-236.74	220.53	0	0	-9.711E-06	7.538E-06	-1.208E-05	-0.003095	-0.004208	0.01
-456.62	11497.08	-0.000288	0.001	0.001	0.001	-0.001	-0.09	0.15	0.18
-7180.04	12064.9	0.0002793	-0.0004062	0.001	0.001	-0.001	-0.09	-0.14	0.16
-4805.46	5323	-0.0001135	8.2E-05	0.0003413	0.0003392	-0.0003708	0.11	-0.14	0.18
1792	4910.67	3.213E-05	0.000134	0.0003549	0.0004416	-0.0002755	0.11	0.15	0.19
-8.55	215.33	6.37E-05	-0.0001457	-0.0001338	0.0001289	-0.0002109	0.02	-0.03	0.04
-134.48	225.97	-6.178E-05	8.984E-05	-0.0001308	0.0001652	-0.0001372	0.02	0.03	0.04
-90	99.7	2.511E-05	-1.814E-05	-7.549E-05	8.201E-05	-7.503E-05	-0.03	0.03	0.04
33.56	91.97	-7.106E-06	-2.963E-05	-7.85E-05	6.094E-05	-9.768E-05	-0.03	-0.03	0.04
-10797.17	10229.65	0	9.17E-06	8.426E-06	1.328E-05	-8.117E-06	-0.001262	0.002141	0.002485
-6607.59	8855.71	0	-5.656E-06	8.236E-06	8.636E-06	-1.04E-05	-0.001262	-0.001888	0.002271
-1172.8	2958.46	0	0	0	0	-5.163E-06	0.001575	-0.001888	0.002459
-6834.3	6378.02	0	0	0	6.149E-06	0	0.001575	0.002141	0.002658
-4960.65	4652.12	0	2.041E-05	1.06E-05	2.535E-05	0	0.00166	0.00234	0.002869
-6271.46	5832.95	0	2.313E-05	1.257E-05	2.801E-05	-9.262E-06	0.00166	0.004942	0.01
-6167.26	5692.94	0	0	1.219E-05	1.459E-05	-1.015E-05	1.627E-05	0.004942	0.004942
-4826.11	4469.23	0	1.069E-05	1.022E-05	1.681E-05	-6.397E-06	1.627E-05	0.00234	0.00234
-105.15	98.29	0	-1.193E-05	-6.199E-06	0	-1.482E-05	-0.0009705	-0.001368	0.001677
-136.46	126.58	0	-1.352E-05	-7.349E-06	5.414E-06	-1.637E-05	-0.0009705	-0.002889	0.003048
-134.15	123.62	0	0	-7.126E-06	5.932E-06	-8.527E-06	-9.51E-06	-0.002889	0.002889
-102.19	94.42	0	-6.25E-06	-5.976E-06	0	-9.824E-06	-9.51E-06	-0.001368	0.001368
-171.51	160.39	0	-1.666E-05	-8.655E-06	0	-2.069E-05	-0.001355	-0.00191	0.002342

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-221.78	205.79	0	-1.888E-05	-1.026E-05	7.56E-06	-2.286E-05	-0.001355	-0.004034	0.004255
-218.03	200.96	0	0	-9.95E-06	8.283E-06	-1.191E-05	-1.328E-05	-0.004034	0.004034
-166.71	154.08	0	-8.727E-06	-8.343E-06	5.221E-06	-1.372E-05	-1.328E-05	-0.00191	0.00191
416.81	1034.14	7.749E-05	0.001	0.0003163	0.001	-6.993E-05	0.05	0.07	0.09
1990.37	4347.3	-0.0001307	0.001	0.000375	0.001	-0.0002763	0.05	0.15	0.16
1645.76	4271.11	0	0.0001283	0.0003636	0.0004351	-0.0003027	0.0004853	0.15	0.15
268.18	747.46	-8.423E-06	0.0003189	0.0003049	0.001	-0.0001908	0.0004853	0.07	0.07
7.81	19.37	-1.714E-05	-0.0001347	-6.997E-05	1.547E-05	-0.0001673	-0.01	-0.02	0.02
37.28	81.42	2.892E-05	-0.0001526	-8.296E-05	6.111E-05	-0.0001848	-0.01	-0.03	0.03
30.82	79.99	0	-2.839E-05	-8.044E-05	6.696E-05	-9.624E-05	-0.0001073	-0.03	0.03
5.02	14	0	-7.055E-05	-6.745E-05	4.221E-05	-0.0001109	-0.0001073	-0.02	0.02
-5065.8	4750.41	0	8.479E-06	0	1.053E-05	0	0.0006897	0.0009719	0.001192
-6407.92	5959.53	0	9.608E-06	5.222E-06	1.164E-05	0	0.0006897	0.002053	0.002166
-6301.41	5816.56	0	0	5.064E-06	6.059E-06	0	6.758E-06	0.002053	0.002053
-4928.3	4563.66	0	0	0	6.981E-06	0	6.758E-06	0.0009719	0.0009719
568.76	1251.22	0	0	0	0	0	-0.0009893	0.002431	0.002625
-2418.57	2384.9	0	0	0	0	0	-0.0009893	-0.0005015	0.001109
-2500.49	2392.28	0	0	0	0	0	0.0001648	-0.0005015	0.0005279
211.36	1451.26	0	-1.653E-05	0	0	-1.726E-05	0.0001648	0.002431	0.002436
13.09	29.83	0	0	0	0	0	0.0005783	-0.001421	0.001534
-53.7	53.34	0	0	0	0	0	0.0005783	0.0002932	0.0006484
-55.86	53.32	0	0	0	0	0	-9.637E-05	0.0002932	0.0003086
4.04	34.4	0	9.661E-06	0	1.009E-05	0	-9.637E-05	-0.001421	0.001424
21.12	47.9	0	0	0	0	0	0.0008075	-0.001984	0.002142
-87.03	86.36	0	0	0	0	0	0.0008075	0.0004094	0.0009054
-90.47	86.38	0	0	0	0	0	-0.0001346	0.0004094	0.0004309
6.69	55.28	0	1.349E-05	0	1.409E-05	0	-0.0001346	-0.001984	0.001989
-4930.7	4449.88	-6.508E-06	4.014E-05	2.234E-05	4.911E-05	-1.548E-05	-0.03	0.07	0.08
-974.44	3908.11	0.0001412	-4.014E-05	1.017E-05	0.0001418	-4.071E-05	-0.03	-0.01	0.03
617.58	3644.48	-7.188E-05	8.281E-05	0.0001012	0.0001328	-0.0001219	0.004918	-0.01	0.02
-4500.02	4788.91	7.304E-05	-0.000493	0.0001133	9.489E-05	-0.001	0.004918	0.07	0.07
-92.35	83.34	0	-8.879E-06	0	0	-1.086E-05	0.01	-0.02	0.02
-18.25	73.2	-3.124E-05	8.879E-06	0	9.005E-06	-3.137E-05	0.01	0.003309	0.01
11.57	68.26	1.59E-05	-1.832E-05	-2.238E-05	2.696E-05	-2.937E-05	-0.001088	0.003309	0.003484
-84.28	89.69	-1.616E-05	0.0001091	-2.507E-05	0.0001139	-2.099E-05	-0.001088	-0.02	0.02
581.87	1281.03	0	0	0	0	0	-0.000411	0.00101	0.00109
-2472.27	2438.23	0	0	0	0	0	-0.000411	-0.0002083	0.0004608
-2556.35	2445.6	0	0	0	0	0	6.848E-05	-0.0002083	0.0002193
215.4	1485.65	0	-6.865E-06	0	0	-7.169E-06	6.848E-05	0.00101	0.001012
-11686	11307.43	0	0	0	0	0	-0.001588	-0.001391	0.002111
-6881.23	8017.64	0	0	0	0	0	-0.001588	-0.01	0.01
-6773.68	6968.58	0	3.707E-05	0	3.769E-05	0	8.516E-05	-0.01	0.01
-11771.95	10856.26	0	1.547E-05	5.612E-06	1.746E-05	0	8.516E-05	-0.001391	0.001394
-250.75	242.87	0	0	0	0	0	0.0009285	0.0008133	0.001234
-150.5	175.1	0	0	0	0	0	0.0009285	0.003108	0.003243

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-148.52	152.21	0	-2.167E-05	0	0	-2.203E-05	-4.978E-05	0.003108	0.003108
-252.8	232.85	0	-9.045E-06	0	0	-1.021E-05	-4.978E-05	0.0008133	0.0008149
-408.3	395.41	0	0	0	0	0	0.001296	0.001136	0.001723
-244.43	284.43	0	0	0	0	0	0.001296	0.004339	0.004528
-241.12	247.24	0	-3.026E-05	0	0	-3.077E-05	-6.951E-05	0.004339	0.004339
-411.59	379.17	0	-1.263E-05	0	0	-1.425E-05	-6.951E-05	0.001136	0.001138
-365.39	5096.33	-0.0001408	0.0001169	2.717E-05	0.0001197	-0.0001436	-0.05	-0.04	0.06
-1316.71	7196.71	-1.174E-05	-0.0001169	7.115E-06	-1.127E-05	-0.0001173	-0.05	-0.16	0.17
973.87	6368.77	-4.755E-05	0.001	0.0001474	0.001	-6.608E-05	0.00254	-0.16	0.16
1981.31	4545.49	4.803E-05	0.0004616	0.0001674	0.001	-1.125E-05	0.00254	-0.04	0.04
-6.84	95.45	3.115E-05	-2.585E-05	-6.01E-06	3.177E-05	-2.648E-05	0.01	0.01	0.01
-24.66	134.79	0	2.585E-05	0	2.596E-05	0	0.01	0.04	0.04
18.24	119.28	1.052E-05	-0.0002446	-3.259E-05	1.462E-05	-0.0002487	-0.0005619	0.04	0.04
37.11	85.13	-1.062E-05	-0.0001021	-3.703E-05	0	-0.0001152	-0.0005619	0.01	0.01
-11936.75	11550.3	0	0	0	0	0	-0.0006598	-0.000578	0.0008771
-7031.73	8192.74	0	0	0	0	0	-0.0006598	-0.002208	0.002305
-6922.19	7120.78	0	1.54E-05	0	1.566E-05	0	3.538E-05	-0.002208	0.002208
-12024.76	11089.11	0	6.428E-06	0	7.253E-06	0	3.538E-05	-0.000578	0.000579
-2613.19	3035.28	0	-6.146E-06	1.295E-05	9.221E-06	-1.707E-05	-3.375E-05	-0.0007699	0.0007706
-3799.82	4013.25	0	0	1.365E-05	1.161E-05	-1.571E-05	-3.375E-05	-0.0002679	0.00027
-3490.67	3407.84	0	0	1.403E-05	1.388E-05	-1.418E-05	-3.332E-05	-0.0002679	0.00027
-2261.32	2315.01	0	0	1.332E-05	1.357E-05	-1.308E-05	-3.332E-05	-0.0007699	0.0007706
-53.53	62.92	0	0	-7.573E-06	9.976E-06	-5.39E-06	1.973E-05	0.0004501	0.0004505
-79.78	84.42	0	0	-7.982E-06	9.182E-06	-6.784E-06	1.973E-05	0.0001566	0.0001579
-74.16	72.37	0	0	-8.199E-06	8.287E-06	-8.111E-06	1.948E-05	0.0001566	0.0001578
-47.09	48.42	0	0	-7.789E-06	7.649E-06	-7.931E-06	1.948E-05	0.0004501	0.0004505
-87.74	102.95	0	5.017E-06	-1.057E-05	1.393E-05	-7.526E-06	2.755E-05	0.0006284	0.000629
-130.29	137.84	0	0	-1.115E-05	1.282E-05	-9.473E-06	2.755E-05	0.0002187	0.0002204
-120.93	118.01	0	0	-1.145E-05	1.157E-05	-1.133E-05	2.719E-05	0.0002187	0.0002204
-76.99	79.12	0	0	-1.088E-05	1.068E-05	-1.107E-05	2.719E-05	0.0006284	0.000629
-2235.14	1988.79	-5.067E-05	-0.0001833	0.0003864	0.0002751	-0.001	-0.001007	-0.02	0.02
-1559.12	1961.44	-5.434E-05	-6.802E-05	0.0004073	0.0003462	-0.0004686	-0.001007	-0.01	0.01
101.82	514.48	0	-7.49E-06	0.0004184	0.0004139	-0.0004229	-0.0009939	-0.01	0.01
-1109.38	1020.28	0	1.196E-05	0.0003975	0.0004047	-0.0003903	-0.0009939	-0.02	0.02
-41.86	37.25	1.121E-05	4.055E-05	-8.547E-05	0.0001126	-6.084E-05	0.0002227	0.01	0.01
-29.2	36.74	1.202E-05	1.504E-05	-9.01E-05	0.0001036	-7.658E-05	0.0002227	0.001768	0.001782
1.91	9.64	0	0	-9.255E-05	9.354E-05	-9.156E-05	0.0002198	0.001768	0.001781
-20.78	19.11	0	0	-8.792E-05	8.634E-05	-8.952E-05	0.0002198	0.01	0.01
-2666.72	3098.2	0	0	5.381E-06	0	-7.089E-06	-1.402E-05	-0.0003198	0.0003201
-3879.58	4097.66	0	0	5.672E-06	0	-6.525E-06	-1.402E-05	-0.0001113	0.0001122
-3564.84	3480.21	0	0	5.826E-06	5.764E-06	-5.889E-06	-1.384E-05	-0.0001113	0.0001122
-2308.4	2363.43	0	0	5.535E-06	5.635E-06	-5.436E-06	-1.384E-05	-0.0003198	0.0003201
-2788.86	3338.25	0	0	1.14E-05	1.479E-05	-8.006E-06	0.001703	0.0003519	0.001739
-3246.26	3181.47	-9.646E-06	-7.735E-06	1.249E-05	0	-2.122E-05	0.001703	-0.001032	0.001992
-2278.79	2341.83	0	0	1.083E-05	1.107E-05	-1.059E-05	0.0001565	-0.001032	0.001044



Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-1622.51	2265.9	0	0	9.738E-06	9.266E-06	-1.022E-05	0.0001565	0.0003519	0.0003851
-53.65	64.71	0	0	-6.664E-06	0	-8.648E-06	-0.0009956	-0.0002057	0.001017
-64.12	63.43	5.639E-06	0	-7.301E-06	1.24E-05	0	-0.0009956	0.0006035	0.001164
-46.79	47.97	0	0	-6.33E-06	6.19E-06	-6.471E-06	-9.146E-05	0.0006035	0.0006104
-32.72	44.75	0	0	-5.693E-06	5.975E-06	-5.417E-06	-9.146E-05	-0.0002057	0.0002251
-88.75	106.91	0	0	-9.304E-06	6.535E-06	-1.208E-05	-0.00139	-0.0002872	0.00142
-105.64	104.36	7.873E-06	6.314E-06	-1.019E-05	1.732E-05	0	-0.00139	0.0008426	0.001626
-76.67	78.62	0	0	-8.838E-06	8.643E-06	-9.036E-06	-0.0001277	0.0008426	0.0008522
-53.75	73.73	0	0	-7.948E-06	8.342E-06	-7.563E-06	-0.0001277	-0.0002872	0.0003143
-7044.19	8048.27	9.731E-05	0.0001052	0.0003401	0.0004413	-0.0002388	0.05	0.01	0.05
-6482.56	6086.86	-0.0002877	-0.0002308	0.0003726	0.0001144	-0.001	0.05	-0.03	0.06
-1707.95	1930.96	0	1.196E-05	0.000323	0.0003302	-0.0003159	0.004667	-0.03	0.03
-2043.73	4192.1	0	-2.372E-05	0.0002905	0.0002764	-0.0003049	0.004667	0.01	0.01
-131.93	150.74	-2.153E-05	-2.327E-05	-7.522E-05	5.283E-05	-9.762E-05	-0.01	-0.002322	0.01
-121.41	114	6.365E-05	5.104E-05	-8.241E-05	0.00014	-2.531E-05	-0.01	0.01	0.01
-31.99	36.17	0	0	-7.145E-05	6.987E-05	-7.304E-05	-0.001032	0.01	0.01
-38.28	78.51	0	5.248E-06	-6.425E-05	6.744E-05	-6.114E-05	-0.001032	-0.002322	0.002541
-2842.49	3402.91	0	0	0	6.146E-06	0	0.0007075	0.0001462	0.0007225
-3310.34	3244.83	0	0	5.188E-06	0	-8.814E-06	0.0007075	-0.0004288	0.0008273
-2325.58	2389.8	0	0	0	0	0	6.499E-05	-0.0004288	0.0004337
-1655.23	2310.63	0	0	0	0	0	6.499E-05	0.0001462	0.00016
-2536.7	4548.15	-7.642E-06	0	1.111E-05	8.128E-06	-1.547E-05	-0.0009422	0.0009827	0.001361
-7779.87	7015.31	6.566E-06	0	1.088E-05	1.454E-05	-8.27E-06	-0.0009422	1.225E-05	0.0009423
-7316.15	6830.16	0	0	1.177E-05	1.093E-05	-1.263E-05	-0.0001489	1.225E-05	0.0001494
-1247.23	3510.43	0	-1.035E-05	1.2E-05	6.177E-06	-1.907E-05	-0.0001489	0.0009827	0.0009939
-50.86	92.36	0	0	-6.497E-06	9.046E-06	0	0.0005508	-0.0005745	0.0007959
-162.05	146.03	0	0	-6.358E-06	0	-8.499E-06	0.0005508	-7.159E-06	0.0005508
-152.68	142.86	0	0	-6.879E-06	7.383E-06	-6.392E-06	8.706E-05	-7.159E-06	8.735E-05
-24.11	71.91	0	6.053E-06	-7.018E-06	1.115E-05	0	8.706E-05	-0.0005745	0.000581
-83.61	151.56	6.238E-06	0	-9.071E-06	1.263E-05	-6.634E-06	0.000769	-0.0008021	0.001111
-264.95	238.79	-5.359E-06	0	-8.877E-06	6.75E-06	-1.187E-05	0.000769	-9.995E-06	0.0007691
-249.57	233.45	0	0	-9.605E-06	1.031E-05	-8.925E-06	0.0001216	-9.995E-06	0.000122
-39.85	117.86	0	8.452E-06	-9.799E-06	1.557E-05	-5.042E-06	0.0001216	-0.0008021	0.0008113
-3493.28	4851.41	-0.000228	8.867E-06	0.0003315	0.0002425	-0.0004616	-0.03	0.03	0.04
-3571.33	3766.88	0.0001959	-8.867E-06	0.0003244	0.0004337	-0.0002467	-0.03	0.0003653	0.03
-2834.81	2499.01	-4.237E-05	-8.172E-06	0.000351	0.0003262	-0.0003767	-0.004443	0.0003653	0.004458
-2808.33	3270.49	-7.577E-05	-0.0003089	0.0003581	0.0001843	-0.001	-0.004443	0.03	0.03
-65.43	90.86	5.043E-05	0	-7.333E-05	0.0001021	-5.363E-05	0.01	-0.01	0.01
-66.89	70.55	-4.333E-05	0	-7.177E-05	5.457E-05	-9.594E-05	0.01	-8.08E-05	0.01
-53.09	46.8	9.373E-06	0	-7.765E-05	8.333E-05	-7.215E-05	0.0009827	-8.08E-05	0.000986
-52.6	61.25	1.676E-05	6.832E-05	-7.921E-05	0.0001258	-4.076E-05	0.0009827	-0.01	0.01
-2587.55	4640.51	0	0	0	0	-6.428E-06	-0.0003914	0.0004082	0.0005655
-7941.9	7161.33	0	0	0	6.04E-06	0	-0.0003914	5.087E-06	0.0003914
-7468.83	6973.01	0	0	0	0	-5.246E-06	-6.186E-05	5.087E-06	6.207E-05
-1271.33	3582.33	0	0	0	0	-7.923E-06	-6.186E-05	0.0004082	0.0004129

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2187.2	2451.46	0	0	1.02E-05	1.317E-05	-7.258E-06	0.000693	0.0003899	0.0007952
-722.39	1487.64	0	0	1.036E-05	8.127E-06	-1.263E-05	0.000693	-0.0002497	0.0007367
-793.38	949.71	0	0	9.572E-06	9.891E-06	-9.258E-06	6.34E-05	-0.0002497	0.0002577
-2236.56	2107.14	0	0	9.407E-06	9.221E-06	-9.596E-06	6.34E-05	0.0003899	0.000395
-265.63	296.92	0	0	-5.961E-06	0	-7.702E-06	-0.0004051	-0.0002279	0.0004648
-93.48	189.19	0	0	-6.058E-06	7.384E-06	0	-0.0004051	0.000146	0.0004306
-99.66	123.18	0	0	-5.596E-06	5.412E-06	-5.782E-06	-3.707E-05	0.000146	0.0001506
-269.5	254.37	0	0	-5.499E-06	5.61E-06	-5.39E-06	-3.707E-05	-0.0002279	0.0002309
-383.56	428.78	0	0	-8.324E-06	5.924E-06	-1.075E-05	-0.0005657	-0.0003182	0.000649
-134.75	272.84	0	0	-8.458E-06	1.031E-05	-6.634E-06	-0.0005657	0.0002038	0.0006013
-143.78	177.55	0	0	-7.813E-06	7.557E-06	-8.073E-06	-5.175E-05	0.0002038	0.0002103
-389.24	367.37	0	0	-7.679E-06	7.832E-06	-7.526E-06	-5.175E-05	-0.0003182	0.0003224
-9.21	309	6.984E-05	0.0001067	0.0003042	0.000393	-0.0002165	0.02	0.01	0.02
-201.93	488.83	-8.48E-05	-4.955E-05	0.0003091	0.0002425	-0.0003768	0.02	-0.01	0.02
-207.45	348.46	0	1.573E-05	0.0002856	0.0002951	-0.0002762	0.001891	-0.01	0.01
-30.87	177.24	0	-9.324E-06	0.0002806	0.0002751	-0.0002863	0.001891	0.01	0.01
-118.09	2126.66	-1.545E-05	-2.359E-05	-6.729E-05	4.789E-05	-8.693E-05	-0.004573	-0.002573	0.01
-1491.36	3404.93	1.876E-05	1.096E-05	-6.838E-05	8.335E-05	-5.363E-05	-0.004573	0.001648	0.004861
-1476.29	2448.25	0	0	-6.316E-05	6.109E-05	-6.527E-05	-0.0004184	0.001648	0.0017
-213.2	1240.71	0	0	-6.208E-05	6.332E-05	-6.084E-05	-0.0004184	-0.002573	0.002606
-2452.78	2748.3	0	0	0	5.473E-06	0	0.0002879	0.000162	0.0003303
-815.72	1676.56	0	0	0	0	-5.247E-06	0.0002879	-0.0001037	0.000306
-892.98	1072.74	0	0	0	0	0	2.634E-05	-0.0001037	0.000107
-2506.04	2361.49	0	0	0	0	0	2.634E-05	0.000162	0.0001641
-2334.13	2038.59	0	0	9.987E-06	1.05E-05	-1.011E-05	-0.0005293	0.000219	0.0005728
-2609.14	2297.24	0	0	1.022E-05	1.319E-05	-7.298E-06	-0.0005293	0.0003809	0.000652
-2399.89	2339.77	0	0	1.005E-05	9.863E-06	-1.024E-05	3.46E-05	0.0003809	0.0003824
-2127.53	2063.2	0	0	9.812E-06	1.004E-05	-9.586E-06	3.46E-05	0.000219	0.0002217
-278.12	242.55	0	0	-5.838E-06	5.909E-06	-6.136E-06	0.0003094	-0.000128	0.0003348
-315.35	277.13	0	0	-5.977E-06	0	-7.71E-06	0.0003094	-0.0002226	0.0003812
-288.63	281.68	0	0	-5.875E-06	5.985E-06	-5.766E-06	-2.023E-05	-0.0002226	0.0002236
-251.39	244.52	0	0	-5.736E-06	5.604E-06	-5.87E-06	-2.023E-05	-0.000128	0.0001296
-401.82	350.43	0	0	-8.151E-06	8.25E-06	-8.568E-06	0.000432	-0.0001787	0.0004675
-455.43	400.25	0	0	-8.345E-06	5.957E-06	-1.076E-05	0.000432	-0.0003109	0.0005322
-416.9	406.84	0	0	-8.203E-06	8.357E-06	-8.051E-06	-2.824E-05	-0.0003109	0.0003121
-363.28	353.33	0	0	-8.009E-06	7.825E-06	-8.196E-06	-2.824E-05	-0.0001787	0.000181
-10.41	225.2	-6.965E-05	8.128E-05	0.0002979	0.0003131	-0.0003015	-0.02	0.01	0.02
137.02	227.69	6.92E-05	0.0001065	0.000305	0.0003934	-0.0002177	-0.02	0.01	0.02
-5.55	137.32	0	-9.324E-06	0.0002998	0.0002942	-0.0003054	0.001032	0.01	0.01
-80.19	90.96	0	1.13E-05	0.0002927	0.0002995	-0.000286	0.001032	0.01	0.01
-72.55	1530.94	1.541E-05	-1.798E-05	-6.59E-05	6.669E-05	-6.926E-05	0.003492	-0.001445	0.003779
940.15	1561.01	-1.531E-05	-2.356E-05	-6.746E-05	4.816E-05	-8.703E-05	0.003492	-0.002513	0.004303
-46.08	977.03	0	0	-6.631E-05	6.756E-05	-6.508E-05	-0.0002283	-0.002513	0.002523
-558.79	643.42	0	0	-6.475E-05	6.326E-05	-6.625E-05	-0.0002283	-0.001445	0.001463
-2612.19	2281.06	0	0	0	0	0	-0.0002199	9.097E-05	0.0002379

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2924.48	2574.34	0	0	0	5.479E-06	0	-0.0002199	0.0001582	0.0002709
-2688.52	2621.45	0	0	0	0	0	1.437E-05	0.0001582	0.0001589
-2378.9	2307.7	0	0	0	0	0	1.437E-05	9.097E-05	9.209E-05
-2988.64	2799.97	0	6.532E-06	9.723E-06	1.393E-05	-6.254E-06	0.001529	0.0005798	0.001635
-2527.42	2387.59	0	0	1.005E-05	9.929E-06	-1.107E-05	0.001529	0.0001263	0.001534
-1948.06	1811.3	0	0	8.424E-06	8.653E-06	-8.198E-06	0.0001572	0.0001263	0.0002017
-2445.12	2273.43	0	0	8.096E-06	8.176E-06	-8.016E-06	0.0001572	0.0005798	0.0006008
-358.42	336.2	0	0	-5.684E-06	0	-8.141E-06	-0.0008937	-0.000339	0.0009558
-301.77	285.87	0	0	-5.875E-06	6.472E-06	-5.804E-06	-0.0008937	-7.386E-05	0.0008968
-229.2	213.28	0	0	0	0	-5.058E-06	-9.19E-05	-7.386E-05	0.0001179
-290.76	270.46	0	0	0	0	0	-9.19E-05	-0.000339	0.0003512
-517.73	485.62	0	-5.331E-06	-7.936E-06	5.105E-06	-1.137E-05	-0.001248	-0.0004733	0.001335
-435.95	412.96	0	0	-8.204E-06	9.037E-06	-8.104E-06	-0.001248	-0.0001031	0.001252
-331.25	308.24	0	0	-6.876E-06	6.692E-06	-7.062E-06	-0.0001283	-0.0001031	0.0001646
-420.1	390.76	0	0	-6.608E-06	6.543E-06	-6.674E-06	-0.0001283	-0.0004733	0.0004904
-32.93	205.59	3.399E-05	0.0001949	0.00029	0.0004154	-0.0001866	0.05	0.02	0.05
-95.68	205.82	-0.0001077	7.366E-05	0.0002998	0.0002962	-0.0003303	0.05	0.003769	0.05
-60.03	59.29	0	1.13E-05	0.0002513	0.0002581	-0.0002446	0.00469	0.003769	0.01
-5.87	56.8	0	0	0.0002415	0.0002439	-0.0002391	0.00469	0.02	0.02
-235.28	1429.23	-7.519E-06	-4.31E-05	-6.416E-05	4.127E-05	-9.189E-05	-0.01	-0.003826	0.01
-664.67	1428.38	2.383E-05	-1.629E-05	-6.632E-05	7.306E-05	-6.552E-05	-0.01	-0.0008337	0.01
-410.46	408.63	0	0	-5.559E-05	5.41E-05	-5.709E-05	-0.001037	-0.0008337	0.001331
-41.8	401.64	0	0	-5.342E-05	5.29E-05	-5.395E-05	-0.001037	-0.003826	0.003964
-3347.04	3136.14	0	0	0	5.785E-06	0	0.0006351	0.0002409	0.0006792
-2829.15	2673.41	0	0	0	0	0	0.0006351	5.249E-05	0.0006372
-2177.25	2024.57	0	0	0	0	0	6.531E-05	5.249E-05	8.378E-05
-2735.88	2543.88	0	0	0	0	0	6.531E-05	0.0002409	0.0002496
-2460.85	2137.73	0	1.065E-05	9.11E-06	1.576E-05	-5.587E-06	1.931E-05	0.001131	0.001132
-2548	2221	0	6.336E-06	9.476E-06	1.322E-05	-6.718E-06	1.931E-05	0.0005715	0.0005719
-2441.37	2268.36	0	0	7.948E-06	8.029E-06	-7.869E-06	0.0001161	0.0005715	0.0005832
-2351.76	2164.67	0	0	7.582E-06	7.067E-06	-8.114E-06	0.0001161	0.001131	0.001137
-291.02	252.74	0	-6.225E-06	-5.326E-06	0	-9.213E-06	-1.129E-05	-0.0006614	0.0006615
-303.06	264.16	0	0	-5.54E-06	0	-7.725E-06	-1.129E-05	-0.0003341	0.0003343
-290.4	269.98	0	0	0	0	0	-6.787E-05	-0.0003341	0.0003409
-278.03	255.92	0	0	0	0	0	-6.787E-05	-0.0006614	0.0006649
-420.54	365.23	0	-8.692E-06	-7.436E-06	0	-1.286E-05	-1.576E-05	-0.0009235	0.0009236
-437.87	381.66	0	-5.172E-06	-7.735E-06	5.483E-06	-1.079E-05	-1.576E-05	-0.0004665	0.0004668
-419.58	390.06	0	0	-6.488E-06	6.423E-06	-6.553E-06	-9.476E-05	-0.0004665	0.000476
-401.77	369.83	0	0	-6.189E-06	6.623E-06	-5.768E-06	-9.476E-05	-0.0009235	0.0009283
-0.24	34.78	-1.418E-05	0.0003177	0.0002718	0.0004702	-0.0001667	0.0005759	0.03	0.03
22.76	56.08	0	0.000189	0.0002827	0.0003942	-0.0002004	0.0005759	0.02	0.02
-13.36	68.8	0	0	0.0002371	0.0002395	-0.0002347	0.003463	0.02	0.02
-6.04	6.98	-5.208E-06	-2.604E-05	0.0002262	0.0002108	-0.0002421	0.003463	0.03	0.03
4.03	231.45	0	-7.026E-05	-6.011E-05	3.687E-05	-0.000104	-0.0001274	-0.01	0.01
152.16	392.96	0	-4.181E-05	-6.253E-05	4.433E-05	-8.72E-05	-0.0001274	-0.003771	0.003774

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-92.6	482.9	0	0	-5.245E-05	5.192E-05	-5.298E-05	-0.0007661	-0.003771	0.003848
-39.57	49.48	0	5.76E-06	-5.003E-05	5.354E-05	-4.663E-05	-0.0007661	-0.01	0.01
-2751.87	2390.47	0	0	0	6.547E-06	0	8.02E-06	0.00047	0.0004701
-2851.05	2485.15	0	0	0	5.49E-06	0	8.02E-06	0.0002374	0.0002376
-2731.77	2538.33	0	0	0	0	0	4.823E-05	0.0002374	0.0002423
-2629.79	2420.59	0	0	0	0	0	4.823E-05	0.00047	0.0004725
24.09	1297.89	0	-1.52E-05	9.114E-06	6.494E-06	-1.903E-05	2.682E-05	-0.01	0.01
-5422.2	5341.15	0	0	6.838E-06	8.017E-06	-6.897E-06	2.682E-05	-0.0007784	0.0007789
-5757	5091.29	0	6.673E-06	8.55E-06	1.356E-05	0	-0.001207	-0.0007784	0.001436
-1142.53	1429.54	0	0	1.083E-05	1.085E-05	-1.127E-05	-0.001207	-0.01	0.01
9.29	159.23	0	8.885E-06	-5.328E-06	1.112E-05	0	-1.568E-05	0.003205	0.003205
-659	647.26	0	0	0	0	0	-1.568E-05	0.0004551	0.0004553
-700.3	618.38	0	0	0	0	-7.926E-06	0.0007058	0.0004551	0.0008397
-136.67	176.84	0	0	-6.329E-06	6.588E-06	-6.343E-06	0.0007058	0.003205	0.003282
13.17	229.85	0	1.241E-05	-7.439E-06	1.553E-05	-5.3E-06	-2.189E-05	0.004475	0.004475
-951.56	934.69	0	0	-5.581E-06	5.63E-06	-6.543E-06	-2.189E-05	0.0006354	0.0006358
-1011.19	892.94	0	-5.447E-06	-6.979E-06	0	-1.107E-05	0.0009854	0.0006354	0.001173
-197.42	255.21	0	0	-8.837E-06	9.198E-06	-8.857E-06	0.0009854	0.004475	0.004582
-425.02	398.54	7.949E-05	-0.0004534	0.0002719	0.0001937	-0.001	0.0008	-0.16	0.16
68.26	607.14	-7.206E-05	0.0001054	0.000204	0.0002392	-0.0002058	0.0008	-0.02	0.02
322.59	575.34	8.771E-05	0.0001991	0.0002551	0.0004045	-0.0001177	-0.04	-0.02	0.04
-352.81	445.86	-7.367E-05	6.12E-05	0.000323	0.0003237	-0.0003362	-0.04	-0.16	0.17
-2918.19	2734.16	-1.758E-05	0.0001003	-6.014E-05	0.0001256	-4.285E-05	-0.000177	0.04	0.04
474.66	4181.74	1.594E-05	-2.332E-05	-4.512E-05	4.551E-05	-5.29E-05	-0.000177	0.01	0.01
2205.48	3965.15	-1.94E-05	-4.404E-05	-5.642E-05	2.603E-05	-8.947E-05	0.01	0.01	0.01
-2423.61	3048.69	1.63E-05	-1.354E-05	-7.144E-05	7.436E-05	-7.16E-05	0.01	0.04	0.04
33.55	1456.77	0	-6.314E-06	0	0	-7.905E-06	1.114E-05	-0.002277	0.002278
-6081.15	5988.33	0	0	0	0	0	1.114E-05	-0.0003234	0.0003236
-6457.28	5709.62	0	0	0	5.632E-06	0	-0.0005015	-0.0003234	0.0005967
-1279.05	1606.06	0	0	0	0	0	-0.0005015	-0.002277	0.002332
-6172.37	5360.58	-1.083E-05	2.224E-05	2.089E-05	3.235E-05	-2.093E-05	-0.003448	0.01	0.01
-4734.62	4718.22	1.021E-05	-1.369E-05	2.042E-05	2.192E-05	-2.54E-05	-0.003448	-0.01	0.01
-1243.92	1915.34	0	0	1.273E-05	1.205E-05	-1.4E-05	0.00391	-0.01	0.01
-4185.6	3788.79	0	5.671E-06	1.32E-05	1.673E-05	-1.009E-05	0.00391	0.01	0.01
-754.94	654.67	6.329E-06	-1.3E-05	-1.221E-05	1.224E-05	-1.891E-05	0.002015	-0.003307	0.003873
-572.84	579.84	-5.97E-06	8.003E-06	-1.193E-05	1.485E-05	-1.281E-05	0.002015	0.002938	0.003563
-146.25	234.7	0	0	-7.439E-06	8.183E-06	-7.043E-06	-0.002286	0.002938	0.003723
-508.01	459.62	0	0	-7.716E-06	5.897E-06	-9.778E-06	-0.002286	-0.003307	0.00402
-1089.91	945.19	8.837E-06	-1.815E-05	-1.705E-05	1.709E-05	-2.64E-05	0.002814	-0.004618	0.01
-827.26	837	-8.336E-06	1.117E-05	-1.666E-05	2.073E-05	-1.789E-05	0.002814	0.004103	0.004975
-211.37	338.82	0	0	-1.039E-05	1.143E-05	-9.834E-06	-0.003192	0.004103	0.01
-733.57	663.71	0	0	-1.077E-05	8.234E-06	-1.365E-05	-0.003192	-0.004618	0.01
-39.29	821.13	-0.000323	0.001	0.001	0.001	-0.001	-0.1	0.17	0.2
-581.24	886.02	0.0003047	-0.0004084	0.001	0.001	-0.001	-0.1	-0.15	0.18
-403.92	422.46	-0.0001118	5.358E-05	0.0003796	0.0003594	-0.0004176	0.12	-0.15	0.19

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
128.41	360.19	2.886E-05	0.0001692	0.0003937	0.000499	-0.0003009	0.12	0.17	0.21
-269.81	5662.2	7.144E-05	-0.0001467	-0.0001378	0.0001381	-0.0002134	0.02	-0.04	0.04
-3999.67	6102.06	-6.739E-05	9.033E-05	-0.0001347	0.0001676	-0.0001446	0.02	0.03	0.04
-2775.35	2903.08	2.472E-05	-1.185E-05	-8.397E-05	9.237E-05	-7.95E-05	-0.03	0.03	0.04
878.14	2495.17	-6.384E-06	-3.742E-05	-8.709E-05	6.656E-05	-0.0001104	-0.03	-0.04	0.05
-6927.28	6015.07	0	9.238E-06	8.678E-06	1.344E-05	-8.696E-06	-0.001432	0.00235	0.002752
-5307.42	5297.81	0	-5.687E-06	8.481E-06	9.105E-06	-1.055E-05	-0.001432	-0.002088	0.002532
-1390.09	2149.84	0	0	5.286E-06	5.005E-06	-5.815E-06	0.001624	-0.002088	0.002646
-4693.61	4248.41	0	0	5.483E-06	6.948E-06	0	0.001624	0.00235	0.002857
-2928.28	2660.71	0	2.016E-05	1.065E-05	2.521E-05	0	0.001671	0.002304	0.002846
-4046.56	3700.09	0	2.351E-05	1.276E-05	2.846E-05	-9.396E-06	0.001671	0.01	0.01
-3962.29	3485.7	0	5.476E-06	1.253E-05	1.556E-05	-1.01E-05	2.554E-05	0.01	0.01
-2878.92	2509.21	0	1.185E-05	1.043E-05	1.786E-05	-6.246E-06	2.554E-05	0.002304	0.002304
-344.21	312.2	0	-1.179E-05	-6.228E-06	0	-1.474E-05	-0.0009766	-0.001347	0.001664
-490.51	447.92	0	-1.375E-05	-7.46E-06	5.493E-06	-1.664E-05	-0.0009766	-0.003241	0.003385
-480.22	422.61	0	0	-7.328E-06	5.904E-06	-9.099E-06	-1.493E-05	-0.003241	0.003241
-338.05	294.5	0	-6.926E-06	-6.096E-06	0	-1.044E-05	-1.493E-05	-0.001347	0.001347
-497.49	451.25	0	-1.646E-05	-8.697E-06	0	-2.058E-05	-0.001364	-0.001881	0.002323
-708.33	646.86	0	-1.919E-05	-1.042E-05	7.67E-06	-2.323E-05	-0.001364	-0.004526	0.004727
-693.47	610.28	0	0	-1.023E-05	8.243E-06	-1.27E-05	-2.085E-05	-0.004526	0.004526
-488.59	425.67	0	-9.67E-06	-8.512E-06	5.098E-06	-1.458E-05	-2.085E-05	-0.001881	0.001881
-78.9	114.52	8.144E-05	0.001	0.0003178	0.001	-6.918E-05	0.05	0.07	0.08
137.9	329.14	-0.0001327	0.001	0.0003807	0.001	-0.0002803	0.05	0.17	0.17
103.84	324.57	0	0.0001634	0.0003739	0.0004643	-0.0003013	0.0007619	0.17	0.17
-98.72	114.2	-7.032E-06	0.0003534	0.0003111	0.001	-0.0001863	0.0007619	0.07	0.07
-526.97	771.81	-1.801E-05	-0.0001331	-7.03E-05	1.53E-05	-0.0001664	-0.01	-0.02	0.02
946.79	2279.23	2.935E-05	-0.0001552	-8.421E-05	6.2E-05	-0.0001878	-0.01	-0.04	0.04
712.48	2248.01	0	-3.613E-05	-8.271E-05	6.664E-05	-0.0001027	-0.0001685	-0.04	0.04
-663.5	768.82	0	-7.817E-05	-6.881E-05	4.121E-05	-0.0001178	-0.0001685	-0.02	0.02
-3272.48	2972.91	0	8.377E-06	0	1.047E-05	0	0.000694	0.0009572	0.001182
-4537.06	4148.01	0	9.768E-06	5.301E-06	1.182E-05	0	0.000694	0.002303	0.002405
-4442.51	3908.31	0	0	5.207E-06	6.465E-06	0	1.061E-05	0.002303	0.002303
-3216.96	2803.71	0	0	0	7.418E-06	0	1.061E-05	0.0009572	0.0009573
-1038.55	2700.38	0	0	0	0	0	-0.000983	0.002421	0.002613
-6666.47	6173.86	0	0	0	0	0	-0.000983	-0.0006206	0.001163
-6393.2	6220.63	0	0	0	5.154E-06	0	0.0001451	-0.0006206	0.0006373
922.32	1038.08	0	-1.642E-05	0	0	-1.716E-05	0.0001451	0.002421	0.002425
-112.46	317.15	0	0	0	0	0	0.0005747	-0.001415	0.001528
-800.7	742.34	0	0	0	0	0	0.0005747	0.0003628	0.0006796
-770.48	749.27	0	0	0	0	0	-8.48E-05	0.0003628	0.0003726
110.01	130.57	0	9.599E-06	0	1.003E-05	0	-8.48E-05	-0.001415	0.001418
-162.93	458.38	0	0	0	0	0	0.0008024	-0.001976	0.002133
-1156.55	1072.22	0	0	0	0	0	0.0008024	0.0005065	0.0009489
-1112.81	1082.19	0	0	0	0	0	-0.0001184	0.0005065	0.0005202
158.95	188.35	0	1.34E-05	0	1.401E-05	0	-0.0001184	-0.001976	0.00198

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-381.34	334.32	-8.165E-06	4.169E-05	1.933E-05	4.831E-05	-1.478E-05	-0.03	0.07	0.08
-39.74	431	0.000134	-4.169E-05	7.812E-06	0.0001343	-4.204E-05	-0.03	-0.02	0.03
47.89	438.35	-7.169E-05	0.0001073	0.0001023	0.0001538	-0.0001181	0.004327	-0.02	0.02
-396.67	404.31	7.221E-05	-0.0004898	0.0001138	9.439E-05	-0.001	0.004327	0.07	0.07
-2615.45	2291.96	0	-9.223E-06	0	0	-1.069E-05	0.01	-0.02	0.02
-263.23	2985.56	-2.964E-05	9.223E-06	0	9.299E-06	-2.971E-05	0.01	0.004095	0.01
325.83	3040.75	1.586E-05	-2.374E-05	-2.263E-05	2.613E-05	-3.401E-05	-0.0009572	0.004095	0.004205
-2729.53	2776.11	-1.597E-05	0.0001083	-2.518E-05	0.0001133	-2.088E-05	-0.0009572	-0.02	0.02
-1150.98	3017.39	0	0	0	0	0	-0.0004083	0.001006	0.001086
-7467.15	6916.17	0	0	0	0	0	-0.0004083	-0.0002578	0.0004829
-7163.68	6969.89	0	0	0	0	0	6.026E-05	-0.0002578	0.0002647
1032.81	1168.3	0	-6.821E-06	0	0	-7.13E-06	6.026E-05	0.001006	0.001008
-7402.09	7161.46	0	0	0	0	0	-0.001626	-0.001373	0.002128
-3255.25	4083.2	0	0	0	0	0	-0.001626	-0.01	0.01
-3592.18	3751.19	0	3.715E-05	0	3.778E-05	0	0.0001422	-0.01	0.01
-7613.98	6934.77	0	1.536E-05	5.639E-06	1.74E-05	0	0.0001422	-0.001373	0.00138
-882.42	854.35	0	0	0	0	0	0.0009506	0.0008024	0.001244
-399.4	497.97	0	0	0	0	0	0.0009506	0.003118	0.00326
-439.79	457.23	0	-2.172E-05	0	0	-2.208E-05	-8.311E-05	0.003118	0.003119
-908.08	826.62	0	-8.981E-06	0	0	-1.017E-05	-8.311E-05	0.0008024	0.0008067
-1274.86	1234.29	0	0	0	0	0	0.001327	0.00112	0.001737
-576.57	718.98	0	0	0	0	0	0.001327	0.004353	0.004551
-634.92	660.17	0	-3.033E-05	0	0	-3.084E-05	-0.000116	0.004353	0.004355
-1311.92	1194.25	0	-1.254E-05	0	0	-1.42E-05	-0.000116	0.00112	0.001126
-42.32	244.48	-0.0001431	0.0001181	2.652E-05	0.0001207	-0.0001458	-0.05	-0.04	0.06
-56.76	481.46	-9.817E-06	-0.0001181	6.653E-06	-9.41E-06	-0.0001185	-0.05	-0.16	0.17
74.58	440.24	-5.131E-05	0.001	0.0001483	0.001	-6.999E-05	0.004241	-0.16	0.16
91.32	210.23	5.279E-05	0.0004583	0.0001682	0.001	-7.905E-06	0.004241	-0.04	0.04
-286.49	1711.88	3.165E-05	-2.612E-05	-5.866E-06	3.224E-05	-2.671E-05	0.01	0.01	0.01
-393.18	3330.6	0	2.612E-05	0	2.621E-05	0	0.01	0.04	0.04
508.98	3044.71	1.135E-05	-0.0002452	-3.281E-05	1.548E-05	-0.0002493	-0.0009381	0.04	0.04
631.91	1474.27	-1.168E-05	-0.0001014	-3.721E-05	0	-0.0001148	-0.0009381	0.01	0.01
-8284.5	8015.8	0	0	0	0	0	-0.0006755	-0.0005702	0.000884
-3654.65	4581.16	0	0	0	0	0	-0.0006755	-0.002216	0.002316
-4031.97	4208.4	0	1.543E-05	0	1.569E-05	0	5.906E-05	-0.002216	0.002216
-8522.06	7761.38	0	6.382E-06	0	7.227E-06	0	5.906E-05	-0.0005702	0.0005732
-2462.46	2619.22	0	-6.27E-06	1.29E-05	9.043E-06	-1.713E-05	-4.298E-05	-0.0007481	0.0007493
-2524.6	2819.79	0	0	1.358E-05	1.154E-05	-1.563E-05	-4.298E-05	-0.0002541	0.0002577
-2293.57	2130.34	0	0	1.397E-05	1.381E-05	-1.414E-05	-3.267E-05	-0.0002541	0.0002562
-2365.31	2168.27	0	0	1.329E-05	1.356E-05	-1.303E-05	-3.267E-05	-0.0007481	0.0007488
-288.62	315.34	0	0	-7.539E-06	1.001E-05	-5.286E-06	2.512E-05	0.0004373	0.000438
-287.88	332.98	0	0	-7.94E-06	9.136E-06	-6.746E-06	2.512E-05	0.0001486	0.0001507
-264.4	244.71	0	0	-8.17E-06	8.267E-06	-8.072E-06	1.91E-05	0.0001486	0.0001498
-283.22	259.58	0	0	-7.769E-06	7.614E-06	-7.924E-06	1.91E-05	0.0004373	0.0004377
-417.17	455.45	0	5.118E-06	-1.053E-05	1.398E-05	-7.381E-06	3.508E-05	0.0006106	0.0006116

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-416.44	481.18	0	0	-1.109E-05	1.276E-05	-9.419E-06	3.508E-05	0.0002074	0.0002104
-382.35	353.91	0	0	-1.141E-05	1.154E-05	-1.127E-05	2.667E-05	0.0002074	0.0002091
-409.11	374.97	0	0	-1.085E-05	1.063E-05	-1.106E-05	2.667E-05	0.0006106	0.0006112
-177.54	155.46	-5.421E-05	-0.0001871	0.0003847	0.0002698	-0.001	-0.001282	-0.02	0.02
-87.35	164.12	-5.343E-05	-6.852E-05	0.0004052	0.0003443	-0.0004662	-0.001282	-0.01	0.01
-6.72	115.62	0	-8.275E-06	0.0004169	0.0004119	-0.0004219	-0.0009747	-0.01	0.01
-158.33	161.3	0	1.317E-05	0.0003964	0.0004044	-0.0003886	-0.0009747	-0.02	0.02
-1405.24	1227.53	1.199E-05	4.137E-05	-8.509E-05	0.000113	-5.967E-05	0.0002836	0.004936	0.004944
-1090.68	1267	1.182E-05	1.516E-05	-8.962E-05	0.0001031	-7.615E-05	0.0002836	0.001677	0.001701
61.85	338.34	0	0	-9.221E-05	9.331E-05	-9.112E-05	0.0002156	0.001677	0.001691
-619.97	573.36	0	0	-8.769E-05	8.595E-05	-8.945E-05	0.0002156	0.004936	0.004941
-2750.95	2934.18	0	0	5.357E-06	0	-7.116E-06	-1.785E-05	-0.0003108	0.0003113
-2812.43	3152.42	0	0	5.642E-06	0	-6.492E-06	-1.785E-05	-0.0001056	0.0001071
-2557.84	2374.87	0	0	5.805E-06	5.736E-06	-5.875E-06	-1.357E-05	-0.0001056	0.0001064
-2648.28	2427.53	0	0	5.52E-06	5.631E-06	-5.411E-06	-1.357E-05	-0.0003108	0.0003111
-2168.61	3406.31	0	0	1.16E-05	1.489E-05	-8.305E-06	0.001642	0.0003407	0.001677
-2860	2932.42	-9.289E-06	-7.765E-06	1.259E-05	0	-2.114E-05	0.001642	-0.0009807	0.001913
-2369.95	2174.35	0	0	1.084E-05	1.111E-05	-1.058E-05	0.0001538	-0.0009807	0.0009927
-1204.56	1650.32	0	0	9.846E-06	9.336E-06	-1.037E-05	0.0001538	0.0003407	0.0003738
-237.66	387.48	0	0	-6.78E-06	0	-8.707E-06	-0.0009599	-0.0001992	0.0009804
-330.73	343.7	5.43E-06	0	-7.361E-06	1.236E-05	0	-0.0009599	0.0005733	0.001118
-283.53	260	0	0	-6.337E-06	6.183E-06	-6.492E-06	-8.988E-05	0.0005733	0.0005803
-136.38	185.21	0	0	-5.756E-06	6.061E-06	-5.457E-06	-8.988E-05	-0.0001992	0.0002185
-344.18	560.54	0	0	-9.466E-06	6.779E-06	-1.216E-05	-0.00134	-0.0002781	0.001369
-478.21	496.76	7.582E-06	6.338E-06	-1.028E-05	1.726E-05	0	-0.00134	0.0008005	0.001561
-409.59	375.59	0	0	-8.848E-06	8.633E-06	-9.065E-06	-0.0001255	0.0008005	0.0008103
-197.32	268.04	0	0	-8.037E-06	8.463E-06	-7.62E-06	-0.0001255	-0.0002781	0.0003051
-517.11	613.48	9.253E-05	0.000104	0.000346	0.0004443	-0.0002478	0.05	0.01	0.05
-473.52	433.23	-0.0002771	-0.0002316	0.0003756	0.0001219	-0.001	0.05	-0.03	0.06
-149.71	148.32	0	1.317E-05	0.0003234	0.0003313	-0.0003155	0.004587	-0.03	0.03
-156.01	325.05	-5.134E-06	-2.567E-05	0.0002937	0.0002785	-0.0003093	0.004587	0.01	0.01
-3735.36	4303.04	-2.047E-05	-2.301E-05	-7.653E-05	5.48E-05	-9.828E-05	-0.01	-0.002248	0.01
-3358.17	3147.82	6.129E-05	5.123E-05	-8.308E-05	0.0001395	-2.697E-05	-0.01	0.01	0.01
-853.13	921.62	0	0	-7.153E-05	6.979E-05	-7.328E-05	-0.001015	0.01	0.01
-1108.67	2219.87	0	5.678E-06	-6.497E-05	6.842E-05	-6.16E-05	-0.001015	-0.002248	0.002466
-2406.16	3793.5	0	0	0	6.187E-06	0	0.0006821	0.0001415	0.0006967
-3190.44	3275.61	0	0	5.231E-06	0	-8.782E-06	0.0006821	-0.0004074	0.0007945
-2653.43	2434.28	0	0	0	0	0	6.387E-05	-0.0004074	0.0004124
-1340.93	1835.52	0	0	0	0	0	6.387E-05	0.0001415	0.0001553
-3658.85	3336.47	-7.786E-06	0	1.109E-05	8.051E-06	-1.556E-05	-0.0009689	0.001052	0.00143
-3189.61	3019.44	6.823E-06	0	1.079E-05	1.463E-05	-8.086E-06	-0.0009689	1.351E-05	0.000969
-2594.86	2625.17	0	0	1.167E-05	1.088E-05	-1.248E-05	-0.0001623	1.351E-05	0.0001629
-4331.22	4855.48	0	-1.058E-05	1.197E-05	5.978E-06	-1.923E-05	-0.0001623	0.001052	0.001065
-438.37	399.59	0	0	-6.486E-06	9.095E-06	0	0.0005664	-0.0006152	0.0008362
-366.8	346.76	0	0	-6.307E-06	0	-8.553E-06	0.0005664	-7.897E-06	0.0005665



Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-293.3	307.03	0	0	-6.82E-06	7.297E-06	-6.359E-06	9.49E-05	-7.897E-06	9.523E-05
-507.95	576.57	0	6.183E-06	-6.998E-06	1.124E-05	0	9.49E-05	-0.0006152	0.0006225
-633.23	577.22	6.355E-06	0	-9.056E-06	1.27E-05	-6.571E-06	0.0007909	-0.000859	0.001168
-530.47	501.51	-5.57E-06	0	-8.807E-06	6.6E-06	-1.194E-05	0.0007909	-1.103E-05	0.0007909
-424.39	443.8	0	0	-9.522E-06	1.019E-05	-8.879E-06	0.0001325	-1.103E-05	0.000133
-734.19	833.07	0	8.633E-06	-9.771E-06	1.57E-05	0	0.0001325	-0.000859	0.0008691
-319.79	387.95	-0.0002323	8.318E-06	0.000331	0.0002402	-0.0004641	-0.03	0.03	0.04
-93.75	149.36	0.0002036	-8.318E-06	0.0003219	0.0004365	-0.0002412	-0.03	0.000403	0.03
-120.31	124.45	-4.108E-05	-6.757E-06	0.000348	0.0003245	-0.0003723	-0.004843	0.000403	0.00486
-334.37	349.88	-7.99E-05	-0.0003155	0.0003571	0.0001783	-0.001	-0.004843	0.03	0.03
-1651.62	2083.44	5.138E-05	0	-7.321E-05	0.0001027	-5.312E-05	0.01	-0.01	0.01
-687.71	829.82	-4.503E-05	0	-7.119E-05	5.336E-05	-9.654E-05	0.01	-8.913E-05	0.01
-1350.34	1205.43	9.086E-06	0	-7.698E-05	8.236E-05	-7.178E-05	0.001071	-8.913E-05	0.001075
-2240.07	2239.16	1.767E-05	6.979E-05	-7.899E-05	0.0001269	-3.944E-05	0.001071	-0.01	0.01
-4097.22	3736.06	0	0	0	0	-6.463E-06	-0.0004025	0.0004372	0.0005942
-3556.41	3366.2	0	0	0	6.078E-06	0	-0.0004025	5.611E-06	0.0004025
-2888.15	2931.8	0	0	0	0	-5.185E-06	-6.744E-05	5.611E-06	6.767E-05
-4839.06	5431.8	0	0	0	0	-7.989E-06	-6.744E-05	0.0004372	0.0004423
-2801.6	2478.89	6.513E-06	8.674E-06	1.364E-05	2.127E-05	-6.085E-06	0.002052	0.001034	0.002298
-3226.66	3269.78	0	0	1.336E-05	1.013E-05	-1.66E-05	0.002052	-0.0004823	0.002108
-1082.63	1024.97	0	0	1.059E-05	1.167E-05	-9.561E-06	0.0002033	-0.0004823	0.0005234
-1608.48	1537.45	0	0	1.086E-05	1.046E-05	-1.127E-05	0.0002033	0.001034	0.001054
-74.87	67.83	0	-5.071E-06	-7.971E-06	0	-1.244E-05	-0.0012	-0.0006043	0.001343
-89.92	97.3	0	0	-7.812E-06	9.702E-06	-5.921E-06	-0.0012	0.0002819	0.001232
-30.58	33.66	0	0	-6.191E-06	5.589E-06	-6.821E-06	-0.0001189	0.0002819	0.000306
-35.58	33.23	0	0	-6.351E-06	6.59E-06	-6.117E-06	-0.0001189	-0.0006043	0.0006159
-118.6	107.11	-5.316E-06	-7.08E-06	-1.113E-05	0	-1.736E-05	-0.001675	-0.0008438	0.001876
-141.79	152.3	0	0	-1.091E-05	1.355E-05	-8.267E-06	-0.001675	0.0003936	0.001721
-47.86	51.6	0	0	-8.645E-06	7.804E-06	-9.524E-06	-0.000166	0.0003936	0.0004272
-57.65	53.97	0	0	-8.868E-06	9.201E-06	-8.54E-06	-0.000166	-0.0008438	0.00086
-109.05	2457.33	0.0001943	0.0002588	0.0004068	0.001	-0.0001815	0.06	0.03	0.07
-1901.06	4504.41	-9.459E-05	-9.837E-05	0.0003986	0.0003022	-0.0004951	0.06	-0.01	0.06
-1655.2	2771.01	1.048E-05	5.239E-05	0.000316	0.0003481	-0.0002852	0.01	-0.01	0.02
-4.7	846.46	0	-2.012E-05	0.0003241	0.0003121	-0.0003363	0.01	0.03	0.03
-124.67	128.78	-4.297E-05	-5.724E-05	-8.998E-05	4.015E-05	-0.0001404	-0.01	-0.01	0.02
-169.77	233.1	2.092E-05	2.176E-05	-8.817E-05	0.0001095	-6.683E-05	-0.01	0.003182	0.01
-80.71	144.1	0	-1.159E-05	-6.989E-05	6.309E-05	-7.699E-05	-0.001342	0.003182	0.003453
-41.17	42.78	0	0	-7.169E-05	7.438E-05	-6.904E-05	-0.001342	-0.01	0.01
-2876.41	2546.38	0	0	5.665E-06	8.837E-06	0	0.0008526	0.0004294	0.0009546
-3316.57	3366.62	0	0	5.551E-06	0	-6.894E-06	0.0008526	-0.0002003	0.0008758
-1110.89	1054.35	0	0	0	0	0	8.447E-05	-0.0002003	0.0002174
-1643.8	1570.26	0	0	0	0	0	8.447E-05	0.0004294	0.0004377
-3460.3	4061.05	0	0	1.2E-05	1.327E-05	-1.076E-05	3.13E-05	3.391E-05	4.615E-05
-1703.56	2224.4	0	7.36E-06	1.195E-05	1.616E-05	-8.861E-06	3.13E-05	0.0008486	0.0008491
-1569.28	1482.32	0	0	1.256E-05	1.215E-05	-1.296E-05	-5.278E-05	0.0008486	0.0008502



Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2869.03	2671.82	0	0	1.261E-05	1.286E-05	-1.237E-05	-5.278E-05	3.391E-05	6.273E-05
-78.6	91.57	0	0	-7.018E-06	6.292E-06	-7.757E-06	-1.83E-05	-1.982E-05	2.698E-05
-43.48	53.35	0	0	-6.986E-06	5.18E-06	-9.449E-06	-1.83E-05	-0.0004961	0.0004964
-35.57	33.2	0	0	-7.34E-06	7.579E-06	-7.106E-06	3.085E-05	-0.0004961	0.000497
-61.28	57.36	0	0	-7.373E-06	7.229E-06	-7.517E-06	3.085E-05	-1.982E-05	3.667E-05
-126.97	148.06	0	0	-9.798E-06	8.786E-06	-1.083E-05	-2.555E-05	-2.768E-05	3.767E-05
-69.22	85.53	0	-6.008E-06	-9.754E-06	7.232E-06	-1.319E-05	-2.555E-05	-0.0006926	0.0006931
-57.47	53.72	0	0	-1.025E-05	1.058E-05	-9.921E-06	4.308E-05	-0.0006926	0.000694
-99.84	93.38	0	0	-1.029E-05	1.009E-05	-1.05E-05	4.308E-05	-2.768E-05	5.121E-05
-760.49	1235.2	5.367E-05	2.108E-05	0.0003581	0.0003959	-0.0003211	0.0009337	0.001012	0.001377
-159.1	1190.98	0	0.0002196	0.0003565	0.0004822	-0.0002643	0.0009337	0.03	0.03
128.07	656.73	0	-2.012E-05	0.0003746	0.0003626	-0.0003867	-0.001575	0.03	0.03
-178.92	169.09	0	1.227E-05	0.0003762	0.0003836	-0.0003689	-0.001575	0.001012	0.001871
-44.5	67.02	-1.187E-05	0	-7.921E-05	7.103E-05	-8.756E-05	-0.0002065	-0.0002238	0.0003045
-61.29	63.87	0	-4.857E-05	-7.885E-05	5.847E-05	-0.0001067	-0.0002065	-0.01	0.01
-31.79	29.15	0	0	-8.286E-05	8.555E-05	-8.02E-05	0.0003483	-0.01	0.01
-3.3	11.7	0	0	-8.322E-05	8.16E-05	-8.485E-05	0.0003483	-0.0002238	0.000414
-3538.71	4152.31	0	0	0	5.512E-06	0	1.3E-05	1.409E-05	1.917E-05
-1746.85	2277.33	0	0	0	6.714E-06	0	1.3E-05	0.0003525	0.0003527
-1604.76	1515.39	0	0	5.216E-06	5.049E-06	-5.385E-06	-2.193E-05	0.0003525	0.0003532
-2930.27	2729.12	0	0	5.239E-06	5.342E-06	-5.137E-06	-2.193E-05	1.409E-05	2.606E-05
-5410.32	4971.56	0	0	1.253E-05	1.221E-05	-1.289E-05	-0.000962	0.0003971	0.001041
-2497.99	2396.87	1.631E-05	0	6.625E-06	1.863E-05	0	-0.000962	-0.0007065	0.001194
-3266.39	5570.98	0	1.038E-05	7.459E-06	1.439E-05	0	-3.025E-05	-0.0007065	0.0007071
-3782.44	3754.68	0	0	1.337E-05	1.379E-05	-1.305E-05	-3.025E-05	0.0003971	0.0003982
-119.85	108.91	0	0	-7.327E-06	7.533E-06	-7.136E-06	0.0005624	-0.0002321	0.0006084
-60.64	59.22	-9.532E-06	0	0	0	-1.089E-05	0.0005624	0.000413	0.0006978
-80.37	130.96	0	-6.065E-06	0	0	-8.414E-06	1.768E-05	0.000413	0.0004134
-86.69	83.81	0	0	-7.815E-06	7.626E-06	-8.06E-06	1.768E-05	-0.0002321	0.0002328
-194.31	176.83	0	0	-1.023E-05	1.052E-05	-9.964E-06	0.0007853	-0.0003241	0.0008495
-97.17	94.67	-1.331E-05	0	-5.407E-06	0	-1.521E-05	0.0007853	0.0005766	0.0009742
-128.56	210.67	0	-8.469E-06	-6.089E-06	0	-1.175E-05	2.469E-05	0.0005766	0.0005772
-139.9	135.69	0	0	-1.091E-05	1.065E-05	-1.125E-05	2.469E-05	-0.0003241	0.000325
406.77	903.44	-2.697E-05	6.702E-06	0.0003739	0.0003642	-0.0003844	-0.03	0.01	0.03
-270.53	1886.46	0.0004864	-6.702E-06	0.0001976	0.001	-7.613E-05	-0.03	-0.02	0.04
-768.45	2133.07	1.627E-05	0.0003095	0.0002225	0.0004294	-0.0001036	-0.0009025	-0.02	0.02
-114.52	1026.53	4.491E-05	-2.275E-05	0.0003988	0.0004113	-0.0003892	-0.0009025	0.01	0.01
-50.09	43.46	5.966E-06	0	-8.271E-05	8.503E-05	-8.055E-05	0.01	-0.00262	0.01
-79.4	87.02	-0.0001076	0	-4.371E-05	1.684E-05	-0.000123	0.01	0.004662	0.01
-87.33	110.27	0	-6.846E-05	-4.922E-05	2.291E-05	-9.498E-05	0.0001996	0.004662	0.004666
-58.64	56.65	-9.933E-06	5.032E-06	-8.821E-05	8.608E-05	-9.098E-05	0.0001996	-0.00262	0.002628
-5530.16	5080.39	0	0	5.207E-06	5.071E-06	-5.353E-06	-0.0003996	0.0001649	0.0004323
-2558.62	2456.04	6.774E-06	0	0	7.74E-06	0	-0.0003996	-0.0002935	0.0004958
-3346.72	5701.83	0	0	0	5.979E-06	0	-1.257E-05	-0.0002935	0.0002937
-3869	3838.2	0	0	5.553E-06	5.728E-06	-5.419E-06	-1.257E-05	0.0001649	0.0001654

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-1703.57	2216.56	0	-7.36E-06	1.195E-05	8.861E-06	-1.616E-05	3.13E-05	-0.0008486	0.0008491
-3472.57	4062.06	0	0	1.2E-05	1.076E-05	-1.327E-05	3.13E-05	-3.391E-05	4.615E-05
-2878.08	2681.32	0	0	1.261E-05	1.237E-05	-1.286E-05	-5.278E-05	-3.391E-05	6.273E-05
-1556.24	1468.36	0	0	1.256E-05	1.296E-05	-1.215E-05	-5.278E-05	-0.0008486	0.0008502
-29.04	39.49	0	0	-6.986E-06	9.449E-06	-5.18E-06	-1.83E-05	0.0004961	0.0004964
-70.72	80.73	0	0	-7.018E-06	7.757E-06	-6.292E-06	-1.83E-05	1.982E-05	2.698E-05
-61.79	57.49	0	0	-7.373E-06	7.517E-06	-7.229E-06	3.085E-05	1.982E-05	3.667E-05
-28.1	26.64	0	0	-7.34E-06	7.106E-06	-7.579E-06	3.085E-05	0.0004961	0.000497
-48.97	66.09	0	6.008E-06	-9.754E-06	1.319E-05	-7.232E-06	-2.555E-05	0.0006926	0.0006931
-115.98	132.84	0	0	-9.798E-06	1.083E-05	-8.786E-06	-2.555E-05	2.768E-05	3.767E-05
-100.6	93.61	0	0	-1.029E-05	1.05E-05	-1.009E-05	4.308E-05	2.768E-05	5.121E-05
-46.94	44.47	0	0	-1.025E-05	9.921E-06	-1.058E-05	4.308E-05	0.0006926	0.000694
-1089.89	1187.93	0	-0.0002196	0.0003565	0.0002643	-0.0004822	0.0009337	-0.03	0.03
-625.77	1227.86	-5.367E-05	-2.108E-05	0.0003581	0.0003211	-0.0003959	0.0009337	-0.001012	0.001377
30.9	171.31	0	-1.227E-05	0.0003762	0.0003689	-0.0003836	-0.001575	-0.001012	0.001871
-735.01	680.77	0	2.012E-05	0.0003746	0.0003867	-0.0003626	-0.001575	-0.03	0.03
-9.53	61.99	0	4.857E-05	-7.885E-05	0.0001067	-5.847E-05	-0.0002065	0.01	0.01
-41.23	64.04	1.187E-05	0	-7.921E-05	8.756E-05	-7.103E-05	-0.0002065	0.0002238	0.0003045
-9.52	8.88	0	0	-8.322E-05	8.485E-05	-8.16E-05	0.0003483	0.0002238	0.000414
6.64	35.33	0	0	-8.286E-05	8.02E-05	-8.555E-05	0.0003483	0.01	0.01
-1732.57	2255.95	0	0	0	0	-6.714E-06	1.3E-05	-0.0003525	0.0003527
-3543.17	4142.55	0	0	0	0	-5.512E-06	1.3E-05	-1.409E-05	1.917E-05
-2939.86	2738.8	0	0	5.239E-06	5.137E-06	-5.342E-06	-2.193E-05	-1.409E-05	2.606E-05
-1584.33	1494.99	0	0	5.216E-06	5.385E-06	-5.049E-06	-2.193E-05	-0.0003525	0.0003532
-3223.05	3263.74	0	0	1.336E-05	1.66E-05	-1.013E-05	0.002052	0.0004823	0.002108
-2796.24	2474.77	-6.513E-06	-8.674E-06	1.364E-05	6.085E-06	-2.127E-05	0.002052	-0.001034	0.002298
-1599.21	1528.75	0	0	1.086E-05	1.127E-05	-1.046E-05	0.0002033	-0.001034	0.001054
-1082.28	1024.21	0	0	1.059E-05	9.561E-06	-1.167E-05	0.0002033	0.0004823	0.0005234
-47.05	42.5	0	0	-7.812E-06	5.921E-06	-9.702E-06	-0.0012	-0.0002819	0.001232
-43.53	37.76	0	5.071E-06	-7.971E-06	1.244E-05	0	-0.0012	0.0006043	0.001343
-30.88	30.67	0	0	-6.351E-06	6.117E-06	-6.59E-06	-0.0001189	0.0006043	0.0006159
-23.56	22.23	0	0	-6.191E-06	6.821E-06	-5.589E-06	-0.0001189	-0.0002819	0.000306
-81.55	74.95	0	0	-1.091E-05	8.267E-06	-1.355E-05	-0.001675	-0.0003936	0.001721
-74.57	64.8	5.316E-06	7.08E-06	-1.113E-05	1.736E-05	0	-0.001675	0.0008438	0.001876
-51	50.33	0	0	-8.868E-06	8.54E-06	-9.201E-06	-0.000166	0.0008438	0.00086
-37.17	34.6	0	0	-8.645E-06	9.524E-06	-7.804E-06	-0.000166	-0.0003936	0.0004272
-3235.04	4511.58	9.459E-05	9.837E-05	0.0003986	0.0004951	-0.0003022	0.06	0.01	0.06
-2398.57	2452.75	-0.0001943	-0.0002588	0.0004068	0.0001815	-0.001	0.06	-0.03	0.07
-855.01	851.96	0	2.012E-05	0.0003241	0.0003363	-0.0003121	0.01	-0.03	0.03
-1542.5	2772.92	-1.048E-05	-5.239E-05	0.000316	0.0002852	-0.0003481	0.01	0.01	0.02
-101.29	234.99	-2.092E-05	-2.176E-05	-8.817E-05	6.683E-05	-0.0001095	-0.01	-0.003182	0.01
-6.4	127.21	4.297E-05	5.724E-05	-8.998E-05	0.0001404	-4.015E-05	-0.01	0.01	0.02
0.32	44.35	0	0	-7.169E-05	6.904E-05	-7.438E-05	-0.001342	0.01	0.01
-86.83	144.71	0	1.159E-05	-6.989E-05	7.699E-05	-6.309E-05	-0.001342	-0.003182	0.003453
-3270.08	3304.84	0	0	5.551E-06	6.894E-06	0	0.0008526	0.0002003	0.0008758

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-2839.76	2512.07	0	0	5.665E-06	0	-8.837E-06	0.0008526	-0.0004294	0.0009546
-1629.84	1558.97	0	0	0	0	0	8.447E-05	-0.0004294	0.0004377
-1100.29	1038.69	0	0	0	0	0	8.447E-05	0.0002003	0.0002174
-2478.18	2377.11	-1.631E-05	0	6.625E-06	0	-1.863E-05	-0.000962	0.0007065	0.001194
-5423.72	4988.11	0	0	1.253E-05	1.289E-05	-1.221E-05	-0.000962	-0.0003971	0.001041
-3793.64	3756.57	0	0	1.337E-05	1.305E-05	-1.379E-05	-3.025E-05	-0.0003971	0.0003982
-3266.52	5564.95	0	-1.038E-05	7.459E-06	0	-1.439E-05	-3.025E-05	0.0007065	0.0007071
-40.95	38.3	9.532E-06	0	0	1.089E-05	0	0.0005624	-0.000413	0.0006978
-111.68	104.94	0	0	-7.327E-06	7.136E-06	-7.533E-06	0.0005624	0.0002321	0.0006084
-76.01	75.69	0	0	-7.815E-06	8.06E-06	-7.626E-06	1.768E-05	0.0002321	0.0002328
-58.25	103.69	0	6.065E-06	0	8.414E-06	0	1.768E-05	-0.000413	0.0004134
-69.39	65.16	1.331E-05	0	-5.407E-06	1.521E-05	0	0.0007853	-0.0005766	0.0009742
-182.9	171.31	0	0	-1.023E-05	9.964E-06	-1.052E-05	0.0007853	0.0003241	0.0008495
-124.94	124.31	0	0	-1.091E-05	1.125E-05	-1.065E-05	2.469E-05	0.0003241	0.000325
-97.5	172.36	0	8.469E-06	-6.089E-06	1.175E-05	0	2.469E-05	-0.0005766	0.0005772
-1780.14	1930.95	-0.0004864	6.702E-06	0.0001976	7.613E-05	-0.001	-0.03	0.02	0.04
-1052.35	923.13	2.697E-05	-6.702E-06	0.0003739	0.0003844	-0.0003642	-0.03	-0.01	0.03
-930.43	1016.75	-4.491E-05	2.275E-05	0.0003988	0.0003892	-0.0004113	-0.0009025	-0.01	0.01
-1635.49	2138.15	-1.627E-05	-0.0003095	0.0002225	0.0001036	-0.0004294	-0.0009025	0.02	0.02
-13.98	100.17	0.0001076	0	-4.371E-05	0.000123	-1.684E-05	0.01	-0.004662	0.01
20.14	47.91	-5.966E-06	0	-8.271E-05	8.055E-05	-8.503E-05	0.01	0.00262	0.01
-8.18	52.98	9.933E-06	-5.032E-06	-8.821E-05	9.098E-05	-8.608E-05	0.0001996	0.00262	0.002628
-41.05	111.27	0	6.846E-05	-4.922E-05	9.498E-05	-2.291E-05	0.0001996	-0.004662	0.004666
-2519.04	2415.22	-6.774E-06	0	0	0	-7.74E-06	-0.0003996	0.0002935	0.0004958
-5535.39	5092.88	0	0	5.207E-06	5.353E-06	-5.071E-06	-0.0003996	-0.0001649	0.0004323
-3869.52	3832.06	0	0	5.553E-06	5.419E-06	-5.728E-06	-1.257E-05	-0.0001649	0.0001654
-3324.77	5668.61	0	0	0	0	-5.979E-06	-1.257E-05	0.0002935	0.0002937
-822.68	1751	0	0	0	0	0	0	0	0
-1010.11	1269.22	0	0	0	0	0	0	0	0
-1372.62	1436.75	0	0	0	0	0	0	0	0
-1402.32	2181.78	0	0	0	0	0	0	0	0
-181.73	426.68	0	0	0	0	0	0	0	0
-233.81	316.86	0	0	0	0	0	0	0	0
-328.51	342.46	0	0	0	0	0	0	0	0
-338.6	526.09	0	0	0	0	0	0	0	0
-262.79	616.39	0	0	0	0	0	0	0	0
-338.05	457.66	0	0	0	0	0	0	0	0
-474.71	494.86	0	0	0	0	0	0	0	0
-489.15	760.05	0	0	0	0	0	0	0	0
-765.97	746.76	0	0	0	0	0	0	0	0
-813.42	748.56	0	0	0	0	0	0	0	0
-45.41	62.52	0	0	0	0	0	0	0	0
-90.03	287.25	0	0	0	0	0	0	0	0
237.23	4425.64	0	0	0	0	0	0	0	0
909.8	4436.35	0	0	0	0	0	0	0	0

Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-153.47	370.5	0	0	0	0	0	0	0	0
-1371.71	1702.39	0	0	0	0	0	0	0	0
-1004.13	2176.91	0	0	0	0	0	0	0	0
-1243.65	1585.04	0	0	0	0	0	0	0	0
-1701.12	1779.19	0	0	0	0	0	0	0	0
-1740.93	2707.87	0	0	0	0	0	0	0	0
-1876.87	1672.82	0	0	0	0	0	0	0	0
-1845.47	1661.53	0	0	0	0	0	0	0	0
-1058.53	972.3	0	0	0	0	0	0	0	0
-1055.55	972.34	0	0	0	0	0	0	0	0
-398.23	361.95	0	0	0	0	0	0	0	0
-390.07	359.88	0	0	0	0	0	0	0	0
-254.88	234.16	0	0	0	0	0	0	0	0
-254.34	234.13	0	0	0	0	0	0	0	0
-575.41	523.02	0	0	0	0	0	0	0	0
-563.71	520.07	0	0	0	0	0	0	0	0
-368.32	338.38	0	0	0	0	0	0	0	0
-367.54	338.34	0	0	0	0	0	0	0	0
-168.21	279.77	0	0	0	0	0	0	0	0
-149.13	279.61	0	0	0	0	0	0	0	0
-45.94	95.82	0	0	0	0	0	0	0	0
-64.9	96	0	0	0	0	0	0	0	0
-917.08	1658.03	0	0	0	0	0	0	0	0
-1027.84	1657.1	0	0	0	0	0	0	0	0
-380.47	567.87	0	0	0	0	0	0	0	0
-268.96	568.95	0	0	0	0	0	0	0	0
-2274.53	2033.78	0	0	0	0	0	0	0	0
-2235.06	2020.39	0	0	0	0	0	0	0	0
-1313.4	1206.46	0	0	0	0	0	0	0	0
-1309.88	1206.45	0	0	0	0	0	0	0	0
-1191.9	1187.17	0	0	0	0	0	0	0	0
-1026.28	1657.66	0	0	0	0	0	0	0	0
-1259.98	2009.54	0	0	0	0	0	0	0	0
-1362.73	1414.81	0	0	0	0	0	0	0	0
-262.1	290.77	0	0	0	0	0	0	0	0
-213.5	402.14	0	0	0	0	0	0	0	0
-314.05	496.36	0	0	0	0	0	0	0	0
-326.82	338.72	0	0	0	0	0	0	0	0
-378.56	420.29	0	0	0	0	0	0	0	0
-308.3	581.24	0	0	0	0	0	0	0	0
-453.99	717.47	0	0	0	0	0	0	0	0
-472.3	489.51	0	0	0	0	0	0	0	0
154.3	758.47	0	0	0	0	0	0	0	0
41.18	756.35	0	0	0	0	0	0	0	0
-233.94	290.65	0	0	0	0	0	0	0	0

**Table 5.7 - Element Forces - Area Shells (Part 2 of 2, continued)**

FMin lb/ft	FVM lb/ft	M11 kip-ft/ft	M22 kip-ft/ft	M12 kip-ft/ft	MMax kip-ft/ft	MMin kip-ft/ft	V13 lb/ft	V23 lb/ft	VMax lb/ft
-26.56	62.48	0	0	0	0	0	0	0	0
-4881.95	4495.04	0	0	0	0	0	0	0	0
-4599.53	4482.49	0	0	0	0	0	0	0	0
-541.83	1722.52	0	0	0	0	0	0	0	0
-265.6	370.3	0	0	0	0	0	0	0	0
-1452.35	1472.49	0	0	0	0	0	0	0	0
-1238.38	2056.11	0	0	0	0	0	0	0	0
-1574.03	2505.88	0	0	0	0	0	0	0	0
-1689.55	1753.53	0	0	0	0	0	0	0	0

**5.5 Modal Results**

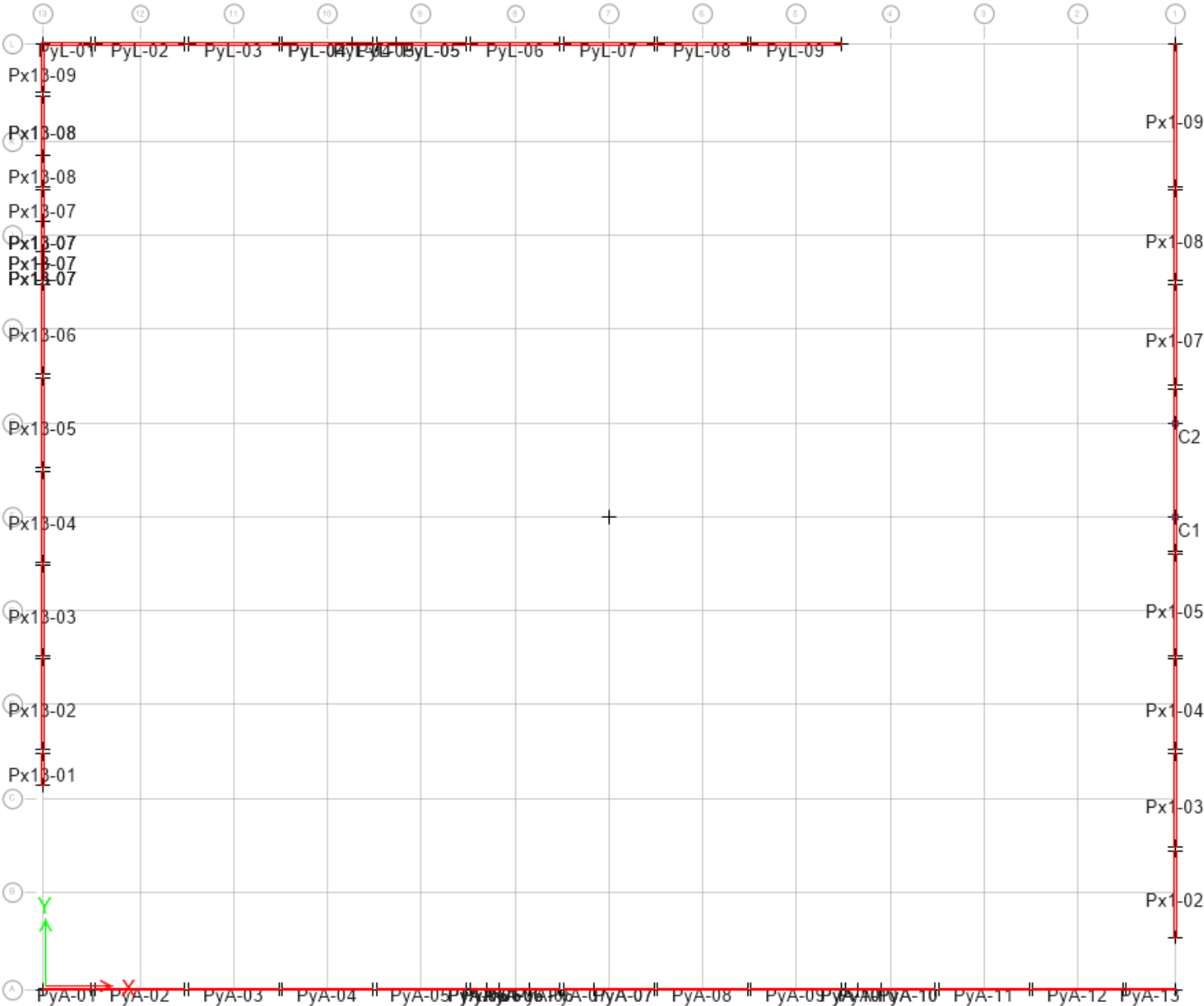
**Table 5.8 - Modal Load Participation Ratios**

Case	ItemType	Item	Static %	Dynamic %
Modal	Acceleration	UX	100	100
Modal	Acceleration	UY	100	100
Modal	Acceleration	UZ	0	0

**Table 5.9 - Modal Direction Factors**

Case	Mode	Period sec	UX	UY	UZ	RZ
Modal	1	0.101	0.237	0.255	0	0.508
Modal	2	0.096	0.099	0.744	0	0.157
Modal	3	0.076	0.664	0.001	0	0.335

## **WALL CALCULATIONS**



**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-01	69	-12	162	7.25	0.609

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	-12	150	-12	162	7.25
Bottom	Leg 1	-12	-12	150	-12	162	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir pos	37	0	0
Bottom	0.031	ASCE7-10 LRFD5 x-dir neg	60	0	11

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	37	0	6	125	231
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	60	11	17	125	231

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	37	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	37	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	60	11	47.52	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	60	11	55.49	700		



# ETABS Shear Wall Design

## ACI 318-19 Pier Design

### Pier Details

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-02	312	-12	300	7.25	0.588

### Material Properties

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

### Design Code Parameters

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	IP <sub>MAX</sub>	IP <sub>MIN</sub>	P <sub>MAX</sub>
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

### Pier Leg Location, Length and Thickness

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	162	-12	462	-12	300	7.25
Bottom	Leg 1	162	-12	462	-12	300	7.25

### Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>

Station	D/C	Flexural	P <sub>u</sub> kip	M <sub>u2</sub> kip-ft	M <sub>u3</sub> kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.022	ASCE7-10 LRFD5 x-dir neg	79	0	-50

### Shear Design

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	P <sub>u</sub> kip	M <sub>u</sub> kip-ft	V <sub>u</sub> kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	38	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	79	-50	43	232	427

### Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)

Station Location	ID	Edge Length (in)	Governing Combo	P <sub>u</sub> kip	M <sub>u</sub> kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	79	-50	41.74	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	79	-50	30.75	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-03	624	-12	299.9999	7.25	0.528

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	474.0001	-12	774	-12	299.9999	7.25
Bottom	Leg 1	474.0001	-12	774	-12	299.9999	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 y-dir neg	68	0	0
Bottom	0.019	ASCE7-10 LRFD5 x-dir neg	69	0	-43

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	50	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	69	-43	45	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	69	-43	36.29	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	69	-43	26.82	700		

## ETABS Shear Wall Design

### ACI 318-19 Pier Design

#### Pier Details

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-04	936	-12	299.9999	7.25	0.5

#### Material Properties

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

#### Design Code Parameters

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

#### Pier Leg Location, Length and Thickness

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	786.0001	-12	1086	-12	299.9999	7.25
Bottom	Leg 1	786.0001	-12	1086	-12	299.9999	7.25

#### Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 y-dir neg	68	0	0
Bottom	0.021	ASCE7-10 LRFD5 x-dir pos	76	0	50

#### Shear Design

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	45	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	58	-50	39	232	427

#### Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	76	50	29.58	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	76	50	40.59	700		

## ETABS Shear Wall Design

### ACI 318-19 Pier Design

#### Pier Details

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-05	1248	-12	300	7.25	0.5

#### Material Properties

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

#### Design Code Parameters

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

#### Pier Leg Location, Length and Thickness

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	1098	-12	1398	-12	300	7.25
Bottom	Leg 1	1098	-12	1398	-12	300	7.25

#### Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir pos	68	0	0
Bottom	0.025	ASCE7-10 LRFD5 x-dir pos	91	0	72

#### Shear Design

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	13	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	91	72	32	232	427

#### Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	91	72	33.92	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	91	72	49.71	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-08	2183.9999	-12	300.0001	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	2033.9999	-12	2334	-12	300.0001	7.25
Bottom	Leg 1	2033.9999	-12	2334	-12	300.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir pos	68	0	0
Bottom	0.026	ASCE7-10 LRFD5 x-dir neg	93	0	-75

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	68	0	21	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	93	-75	24	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	93	-75	51.06	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	93	-75	34.56	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-09	2496	-12	300	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	2346	-12	2646	-12	300	7.25
Bottom	Leg 1	2346	-12	2646	-12	300	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.022	ASCE7-10 LRFD5 x-dir neg	78	0	-50

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	44	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	58	46	50	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	78	-50	41.31	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	78	-50	30.3	700		

## ETABS Shear Wall Design

### ACI 318-19 Pier Design

#### Pier Details

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-11	3120	-12	300	7.25	0.53

#### Material Properties

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

#### Design Code Parameters

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

#### Pier Leg Location, Length and Thickness

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	2970	-12	3270	-12	300	7.25
Bottom	Leg 1	2970	-12	3270	-12	300	7.25

#### Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir pos	68	0	0
Bottom	0.02	ASCE7-10 LRFD5 x-dir pos	71	0	36

#### Shear Design

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	68	0	54	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	71	36	52	232	427

#### Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	71	36	28.76	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	71	36	36.64	700		

# ETABS Shear Wall Design

## ACI 318-19 Pier Design

### Pier Details

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-12	3432.0001	-12	300.0002	7.25	0.602

### Material Properties

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

### Design Code Parameters

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	IP <sub>MAX</sub>	IP <sub>MIN</sub>	P <sub>MAX</sub>
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

### Pier Leg Location, Length and Thickness

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3282	-12	3582.0002	-12	300.0002	7.25
Bottom	Leg 1	3282	-12	3582.0002	-12	300.0002	7.25

### Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>

Station	D/C	Flexural	P <sub>u</sub> kip	M <sub>u2</sub> kip-ft	M <sub>u3</sub> kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.022	ASCE7-10 LRFD5 x-dir pos	80	0	45

### Shear Design

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	P <sub>u</sub> kip	M <sub>u</sub> kip-ft	V <sub>u</sub> kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	68	0	38	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	80	45	43	232	427

### Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)

Station Location	ID	Edge Length (in)	Governing Combo	P <sub>u</sub> kip	M <sub>u</sub> kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	80	45	31.55	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	80	45	41.56	700		



**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyA-13	3675.0001	-12	161.9998	7.25	0.81

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3594.0002	-12	3756	-12	161.9998	7.25
Bottom	Leg 1	3594.0002	-12	3756	-12	161.9998	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	37	0	0
Bottom	0.031	ASCE7-10 LRFD5 x-dir pos	60	0	-11

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	37	0	7	125	231
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	60	-11	17	125	231

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	37	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	37	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	60	-11	55.67	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	60	-11	47.01	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-01	69	3132	162	7.25	1

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	3132	150	3132	162	7.25
Bottom	Leg 1	-12	3132	150	3132	162	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.024	ASCE7-10 LRFD5 x-dir pos	46	-3.231E-02	-63
Bottom	0.049	ASCE7-10 LRFD7 x-dir pos	2	3.565E-02	84

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	46	-63	18	125	231
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	62	-49	25	125	231

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	46	-63	62.87	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	46	-63	15.51	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	62	-49	71.56	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	62	-49	34.27	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-02	312	3132	300	7.25	0.648

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	162	3132	462	3132	300	7.25
Bottom	Leg 1	162	3132	462	3132	300	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.019	ASCE7-10 LRFD5 y-dir pos	67	0	-4

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	46	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	64	-85	44	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	67	-4	31.19	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	67	-4	30.29	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-03	624	3132	300	7.25	0.556

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	474	3132	774	3132	300	7.25
Bottom	Leg 1	474	3132	774	3132	300	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir pos	68	0	0
Bottom	0.026	ASCE7-10 LRFD5 x-dir pos	93	0	108

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	26	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	39	-109	38	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	93	108	31.03	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	93	108	54.9	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-06	1560	3132	300	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	1410	3132	1710	3132	300	7.25
Bottom	Leg 1	1410	3132	1710	3132	300	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.028	ASCE7-10 LRFD5 x-dir neg	101	0	-107

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	68	0	25	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	37	103	39	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	101	-107	58.43	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	101	-107	34.73	700		

# ETABS Shear Wall Design

## ACI 318-19 Pier Design

### Pier Details

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-07	1872	3132	300	7.25	0.5

### Material Properties

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

### Design Code Parameters

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

### Pier Leg Location, Length and Thickness

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	1722	3132	2022	3132	300	7.25
Bottom	Leg 1	1722	3132	2022	3132	300	7.25

### Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir pos	68	0	0
Bottom	0.022	ASCE7-10 LRFD5 x-dir neg	78	0	-77

### Shear Design

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	57	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	78	-77	49	232	427

### Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	78	-77	44.11	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	78	-77	27.18	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-08	2183.9999	3132	299.9998	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	2034	3132	2333.9998	3132	299.9998	7.25
Bottom	Leg 1	2034	3132	2333.9998	3132	299.9998	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.021	ASCE7-10 LRFD5 x-dir pos	77	0	75

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	57	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	59	-77	50	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	77	75	27.35	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	77	75	43.82	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	PyL-09	2496.0004	3132	300.0002	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	IP <sub>MAX</sub>	IP <sub>MIN</sub>	P <sub>MAX</sub>
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	2346.0002	3132	2646.0005	3132	300.0002	7.25
Bottom	Leg 1	2346.0002	3132	2646.0005	3132	300.0002	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	P <sub>u</sub> kip	M <sub>u2</sub> kip-ft	M <sub>u3</sub> kip-ft
Top	0.019	ASCE7-10 LRFD5 x-dir neg	68	0	0
Bottom	0.028	ASCE7-10 LRFD5 x-dir pos	99	0	103

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	P <sub>u</sub> kip	M <sub>u</sub> kip-ft	V <sub>u</sub> kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	68	0	30	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir pos	99	103	41	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	P <sub>u</sub> kip	M <sub>u</sub> kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	68	0	31.29	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	99	103	34.32	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	99	103	57.03	700		



**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px1-02	3756	306	288	7.25	0.602

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3756	162	3756	450	288	7.25
Bottom	Leg 1	3756	162	3756	450	288	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir pos	78	0	0
Bottom	0.033	ASCE7-10 LRFD5 y-dir neg	115	0	-83

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	78	0	31	222	410
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	115	-83	45	222	410

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	78	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	78	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	115	-83	65.2	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	115	-83	45.23	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px1-03	3756	618	312	7.25	0.525

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3756	462	3756	774	312	7.25
Bottom	Leg 1	3756	462	3756	774	312	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir pos	84	0	0
Bottom	0.025	ASCE7-10 LRFD5 y-dir neg	93	0	-68

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	84	0	70	241	444
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	71	117	59	241	444

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	84	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	84	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	93	-68	48.04	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	93	-68	34.1	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px1-04	3756	936.0001	300.0001	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3756	786	3756	1086.0001	300.0001	7.25
Bottom	Leg 1	3756	786	3756	1086.0001	300.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 x-dir pos	81	0	0
Bottom	0.027	ASCE7-10 LRFD5 y-dir pos	96	0	100

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	81	0	71	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	75	-74	57	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	81	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir pos	81	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	96	100	33.12	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	96	100	55.15	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px1-07	3756	2166	336	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3756	1998	3756	2334	336	7.25
Bottom	Leg 1	3756	1998	3756	2334	336	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir pos	91	0	0
Bottom	0.03	ASCE7-10 LRFD5 y-dir neg	121	0	-90

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	91	0	39	259	479
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	121	-90	50	259	479

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	91	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	91	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	121	-90	57.53	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	121	-90	41.61	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px1-08	3756	2495.9999	299.9998	7.25	0.514

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3756	2346	3756	2645.9998	299.9998	7.25
Bottom	Leg 1	3756	2346	3756	2645.9998	299.9998	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 x-dir neg	81	0	0
Bottom	0.027	ASCE7-10 LRFD5 y-dir neg	97	0	-81

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	81	0	78	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	97	-81	55	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	81	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	81	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	97	-81	53.37	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	97	-81	35.55	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px1-09	3756	2894.9999	474.0002	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	3756	2657.9998	3756	3132	474.0002	7.25
Bottom	Leg 1	3756	2657.9998	3756	3132	474.0002	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir pos	128	0	0
Bottom	0.028	ASCE7-10 LRFD5 y-dir pos	157	0	149

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	128	0	82	366	675
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	157	149	70	366	675

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	128	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	128	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	157	149	39.13	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	157	149	52.31	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-01	-12	720	108.0001	7.25	0.543

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	665.9999	-12	774.0001	108.0001	7.25
Bottom	Leg 1	-12	665.9999	-12	774.0001	108.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.024	ASCE7-10 LRFD5 y-dir pos	31	0	7
Bottom	0.054	ASCE7-10 LRFD5 y-dir neg	70	0	24

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	31	7	6	56	126
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	70	24	17	56	126

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	31	7	33.04	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	31	7	45.43	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	70	24	68.84	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	70	24	110.3	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-02	-12	936.0001	300.0001	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	786.0001	-12	1086.0001	300.0001	7.25
Bottom	Leg 1	-12	786.0001	-12	1086.0001	300.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.023	ASCE7-10 LRFD5 y-dir neg	82	0	-20
Bottom	0.027	ASCE7-10 LRFD5 y-dir neg	96	0	-58

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	82	-20	54	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir neg	96	-58	68	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	82	-20	40.14	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	82	-20	35.68	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	96	-58	50.33	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	96	-58	37.52	700		



**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-03	-12	1247.9999	300.0001	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	1097.9999	-12	1398	300.0001	7.25
Bottom	Leg 1	-12	1097.9999	-12	1398	300.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir neg	81	0	0
Bottom	0.024	ASCE7-10 LRFD5 y-dir neg	85	0	-48

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	81	0	78	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	69	72	72	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	81	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	81	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	85	-48	44.47	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	85	-48	33.87	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-04	-12	1560.0001	300.0001	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	1410	-12	1710.0001	300.0001	7.25
Bottom	Leg 1	-12	1410	-12	1710.0001	300.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir pos	81	0	0
Bottom	0.023	ASCE7-10 LRFD5 y-dir pos	83	0	64

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	81	0	84	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	83	64	79	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	81	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	81	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	83	64	31.01	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	83	64	45.2	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-05	-12	1872.0003	300.0001	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	1722.0002	-12	2022.0004	300.0001	7.25
Bottom	Leg 1	-12	1722.0002	-12	2022.0004	300.0001	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir neg	81	0	0
Bottom	0.027	ASCE7-10 LRFD5 y-dir pos	98	0	78

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	81	0	75	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	98	78	65	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	81	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir neg	81	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	98	78	36.61	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	98	78	53.9	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-06	-12	2184.0001	299.9999	7.25	0.5

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	2034.0001	-12	2334	299.9999	7.25
Bottom	Leg 1	-12	2034.0001	-12	2334	299.9999	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.022	ASCE7-10 LRFD5 y-dir pos	81	0	0
Bottom	0.034	ASCE7-10 LRFD5 y-dir pos	123	0	120

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	81	0	27	232	427
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	123	120	45	232	427

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	81	0	37.17	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	81	0	37.17	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	123	120	43.17	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 y-dir pos	123	120	69.71	700		

**ETABS Shear Wall Design****ACI 318-19 Pier Design****Pier Details**

Story ID	Pier ID	Centroid X (in)	Centroid Y (in)	Length (in)	Thickness (in)	LLRF
Story1	Px13-09	-12	3051	162	7.25	1

**Material Properties**

$E_c$ (lb/in <sup>2</sup> )	$f'_c$ (lb/in <sup>2</sup> )	Lt.Wt Factor (Unitless)	$f_y$ (lb/in <sup>2</sup> )	$f_{ys}$ (lb/in <sup>2</sup> )
1686082.74	3500	1	60000	60000

**Design Code Parameters**

$\Phi_T$	$\Phi_C$	$\Phi_v$	$\Phi_v$ (Seismic)	$IP_{MAX}$	$IP_{MIN}$	$P_{MAX}$
0.9	0.65	0.75	0.6	0.04	0.0025	0.8

**Pier Leg Location, Length and Thickness**

Station Location	ID	Left X <sub>1</sub> in	Left Y <sub>1</sub> in	Right X <sub>2</sub> in	Right Y <sub>2</sub> in	Length in	Thickness in
Top	Leg 1	-12	2970	-12	3132	162	7.25
Bottom	Leg 1	-12	2970	-12	3132	162	7.25

**Flexural Design for P, M<sub>3</sub> and M<sub>2</sub>**

Station	D/C	Flexural	$P_u$ kip	$M_{u2}$ kip-ft	$M_{u3}$ kip-ft
Top	0.027	ASCE7-10 LRFD5 x-dir neg	52	-6.439E-02	55
Bottom	0.028	ASCE7-10 LRFD5 x-dir neg	52	8.926E-03	-78

**Shear Design**

Station Location	ID	Rebar in <sup>2</sup> /ft	Shear Combo	$P_u$ kip	$M_u$ kip-ft	$V_u$ kip	$\Phi V_c$ kip	$\Phi V_n$ kip
Top	Leg 1	0.2175	ASCE7-10 LRFD5 x-dir neg	52	55	9	125	231
Bottom	Leg 1	0.2175	ASCE7-10 LRFD5 y-dir pos	41	38	17	125	231

**Boundary Element Check (ACI 18.10.6.3, 18.10.6.4)**

Station Location	ID	Edge Length (in)	Governing Combo	$P_u$ kip	$M_u$ kip-ft	Stress Comp lb/in <sup>2</sup>	Stress Limit lb/in <sup>2</sup>	C Depth in	C Limit in
Top-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	52	55	23.19	700		
Top-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	52	55	65.14	700		
Bottom-Left	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	52	-78	73.54	700		
Bottom-Right	Leg 1	Not Required	ASCE7-10 LRFD5 x-dir neg	52	-78	14.79	700		

## ETABS MODEL SHEAR DESIGN CHECK

o ETABS hardcodes  $P_{t,min} = 0.0025$  for shear design

For instance,  $P_y A - 02$  w/  $\rho_t = 0.0025$

$$\begin{aligned} \phi V_n &= \phi (3\sqrt{f'_c} + \rho_t f_y) A_c \\ &= 0.6 (3\sqrt{3500} + 0.0025(60,000)) (300" \times 7.25") \\ &= 427 \text{ k} \end{aligned}$$

o Existing tilt up walls  $\rho_t = \frac{0.2}{16" \times 7\frac{1}{4}"} = 0.0017$

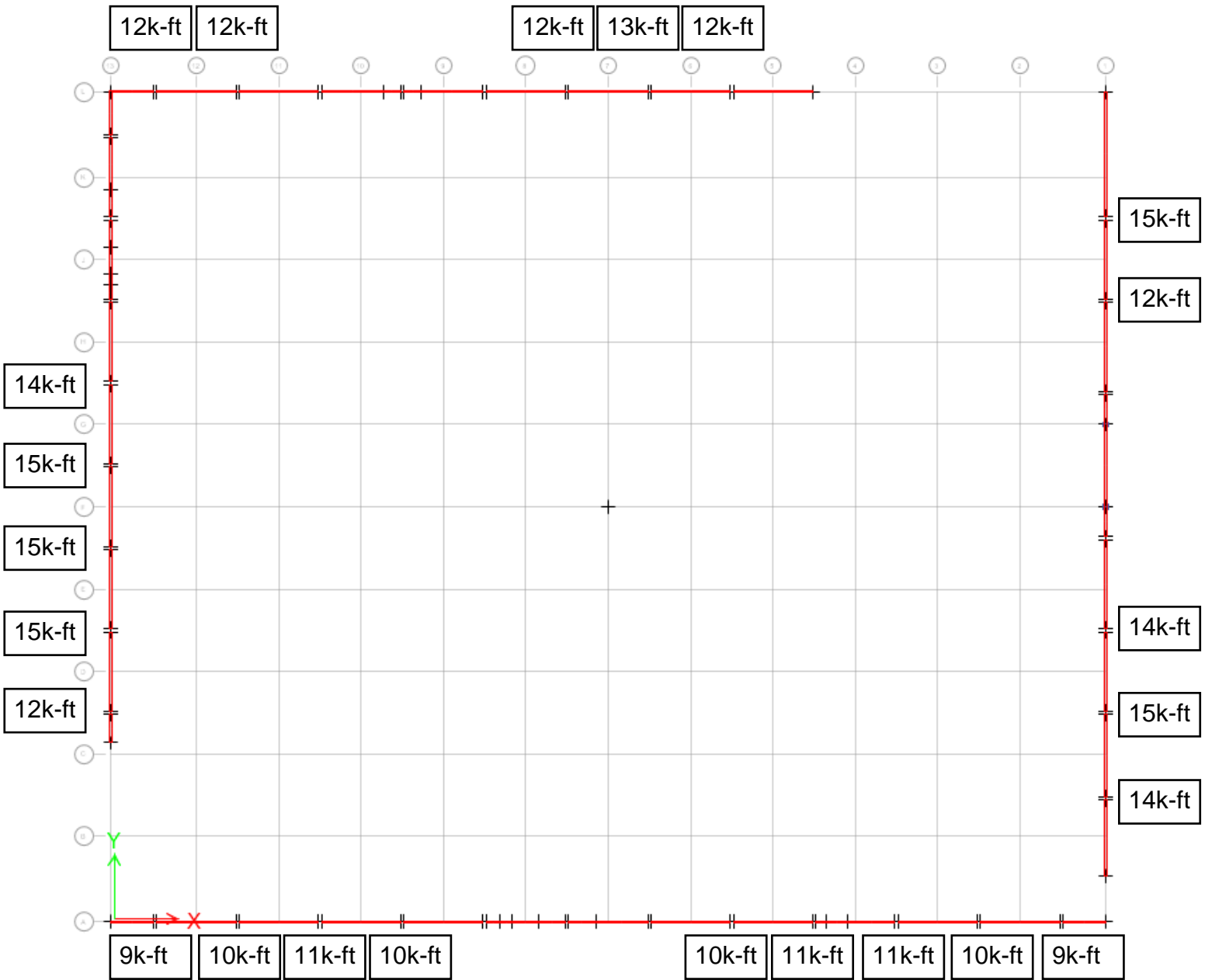
$$\begin{aligned} \phi V_n &= \phi (3\sqrt{f'_c} + \rho_t f_y) A_c \\ &= 0.6 (3\sqrt{3500} + 0.0017(60,000)) (300" \times 7.25") \\ &= 365 \text{ k} \end{aligned}$$

$$\frac{\text{(Model)}}{\text{(Actual)}} = \frac{427 \text{ k}}{365 \text{ k}} = 117\%$$

o ETABS shear wall design capacity,  $\phi V_n$  is 17% higher than the actual wall design. Shear demand,  $V_u$ , to capacity,  $\phi V_n$  is about 10%. Reducing the ETABS shear capacities by 17%, the walls would remain adequate.

## **PANEL CONNECTION DESIGN**

ETABS MODEL WALL PANEL CONNECTION  
PLATE FORCES



Maximum forces on wall panel connectors  
LRFD Envelope

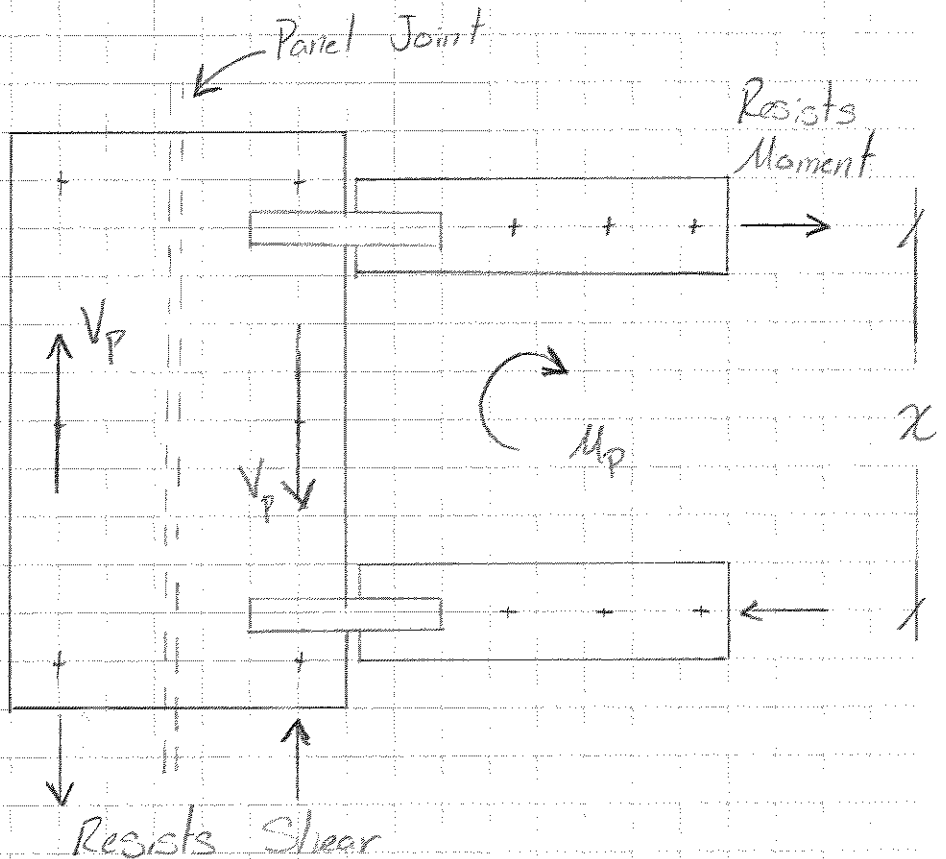


## WALL PANEL CONNECTION TYPE I

Maximum Connection plate moment  
per ETABS Model

$$V_p = 13 \text{ k} ; M_p = 13 \text{ k-ft}$$

$$\text{Overstrength, } \Omega = 2.5$$



$$\text{Force to shear resisting plates} = \Omega V_p = 32.5 \text{ k}$$

$$\begin{aligned} \text{Force to moment resisting plates} &= \frac{\Omega M_p}{x} \\ &= \frac{2.5 (13 \text{ k-ft})}{(1.67 \text{ ft})} = 15 \text{ k} \end{aligned}$$

**Hilti PROFIS Engineering 3.0.66**
[www.hilti.com](http://www.hilti.com)

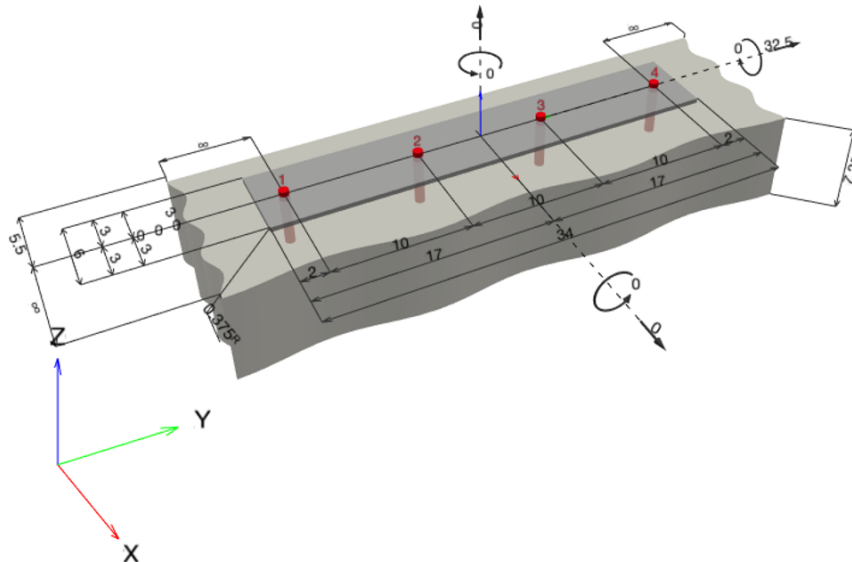
Company:  
 Address:  
 Phone | Fax: |  
 Design: south hill mall - conn plate type 1  
 Fastening point:

Page: 1  
 Specifier:  
 E-Mail:  
 Date: 1/7/2021

**Specifier's comments:**
**1 Input data**

<b>Anchor type and diameter:</b>	<b>Kwik Bolt TZ - SS 304 3/4 (3 3/4)</b>	
Item number:	not available	
Effective embedment depth:	$h_{ef,act} = 3.750$ in., $h_{nom} = 4.313$ in.	
Material:	AISI 304	
Evaluation Service Report:	ESR-1917	
Issued   Valid:	1/1/2020   5/1/2021	
Proof:	Design Method ACI 318-14 / Mech	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.375$ in.	
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 6.000$ in. x $34.000$ in. x $0.375$ in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 5000, $f'_c = 5,000$ psi; $h = 7.250$ in.	
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: > No. 4 bar	
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))	

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

**Geometry [in.] & Loading [kip, ft.kip]**


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Company:	Page: 2
Address:	Specifier:
Phone   Fax:	E-Mail:
Design: south hill mall - conn plate type 1	Date: 1/7/2021
Fastening point:	

**1.1 Design results**

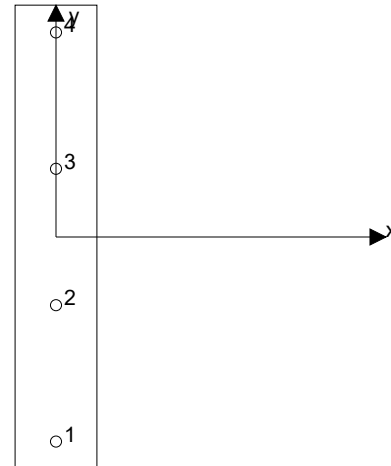
Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 0.000; V <sub>x</sub> = 0.000; V <sub>y</sub> = 32.500; M <sub>x</sub> = 0.00000; M <sub>y</sub> = 0.00000; M <sub>z</sub> = 0.00000;	yes	97

**2 Load case/Resulting anchor forces**
**Anchor reactions [kip]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.000	8.125	0.000	8.125
2	0.000	8.125	0.000	8.125
3	0.000	8.125	0.000	8.125
4	0.000	8.125	0.000	8.125

max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0.000 [kip]  
 resulting compression force in (x/y)=(0.000/0.000): 0.000 [kip]



Anchor forces are calculated based on the assumption of a rigid anchor plate.

**3 Tension load**

	Load N <sub>ua</sub> [kip]	Capacity $\phi$ N <sub>n</sub> [kip]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	N/A	N/A	N/A	N/A

\* highest loaded anchor    \*\*anchor group (anchors in tension)

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Company:	Page: 3
Address:	Specifier:
Phone   Fax:	E-Mail:
Design: south hill mall - conn plate type 1	Date: 1/7/2021
Fastening point:	

**4 Shear load**

	Load $V_{ua}$ [kip]	Capacity $\phi V_n$ [kip]	Utilization $\beta_v = V_{ua} / \phi V_n$	Status
Steel Strength*	8.125	8.379	97	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	32.500	62.142	53	OK
Concrete edge failure in direction x-**	32.500	33.859	96	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

**4.1 Steel Strength**

$V_{sa,eq}$  = ESR value      refer to ICC-ES ESR-1917  
 $\phi V_{steel} \geq V_{ua}$       ACI 318-14 Table 17.3.1.1

**Variables**

$A_{se,V}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]	$\alpha_{v,seis}$
0.24	101,500	0.820

**Calculations**

$V_{sa,eq}$ [kip]
12.890

**Results**

$V_{sa,eq}$ [kip]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi V_{sa,eq}$ [kip]	$V_{ua}$ [kip]
12.890	0.650	1.000	8.379	8.125

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Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - conn plate type 1	Date:	1/7/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp,g} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1b)}$$

$$\phi V_{cp,g} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	3.750	0.000	0.000	5.500
$\psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
1.000	10.000	24	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [kip]
458.91	126.56	1.000	1.000	0.993	1.000	12.324

**Results**

$V_{cp,g}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp,g}$ [kip]	$V_{ua}$ [kip]
88.774	0.700	1.000	1.000	62.142	32.500

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Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - conn plate type 1	Date:	1/7/2021
Fastening point:			

**4.3 Concrete edge failure in direction x-**

$$V_{cbg} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1b)}$$

$$\phi V_{cbg} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ec,V} = \left( \frac{1}{1 + \frac{2e_v}{3c_{a1}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.5)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 7 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.2a)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$e_{cV}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]
5.500	-	0.000	1.200	7.250
$l_e$ [in.]	$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\Psi_{parallel,V}$
3.750	1.000	0.750	5,000	2.000

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [kip]
337.12	136.12	1.000	1.000	1.067	7.629

**Results**

$V_{cbg}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cbg}$ [kip]	$V_{ua}$ [kip]
48.370	0.700	1.000	1.000	33.859	32.500

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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - conn plate type 1	Date:	1/7/2021
Fastening point:			

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**5 Warnings**

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_0$ .
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-14, Section 17.8.1.

**Fastening meets the design criteria!**

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Company:  
 Address:  
 Phone | Fax: |  
 Design: south hill mall - conn plate type 1  
 Fastening point:

Page: 7  
 Specifier:  
 E-Mail:  
 Date: 1/7/2021

### 6 Installation data

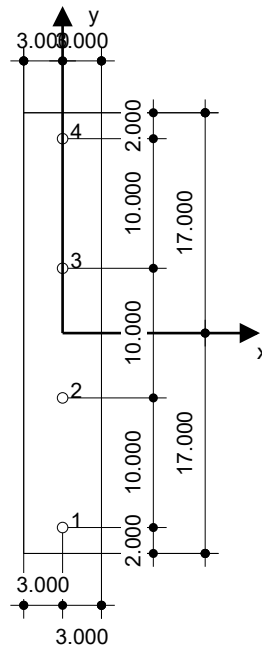
Profile: no profile  
 Hole diameter in the fixture:  $d_f = 0.812$  in.  
 Plate thickness (input): 0.375 in.  
 Recommended plate thickness: not calculated  
 Drilling method: Hammer drilled  
 Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.

Anchor type and diameter: Kwik Bolt TZ - SS 304 3/4 (3 3/4)  
 Item number: not available  
 Installation torque: 0.11000 ft.kip  
 Hole diameter in the base material: 0.750 in.  
 Hole depth in the base material: 4.500 in.  
 Minimum thickness of the base material: 6.000 in.

Hilti KB-TZ stud anchor with 4.31252 in embedment, 3/4 (3 3/4), Stainless steel, installation per ESR-1917

#### 6.1 Recommended accessories

Drilling	Cleaning	Setting
<ul style="list-style-type: none"> <li>• Suitable Rotary Hammer</li> <li>• Properly sized drill bit</li> </ul>	<ul style="list-style-type: none"> <li>• Manual blow-out pump</li> </ul>	<ul style="list-style-type: none"> <li>• Torque wrench</li> <li>• Hammer</li> </ul>



Coordinates Anchor [in.]

Anchor	x	y	C <sub>-x</sub>	C <sub>+x</sub>	C <sub>-y</sub>	C <sub>+y</sub>
1	0.000	-15.000	5.500	-	-	-
2	0.000	-5.000	5.500	-	-	-
3	0.000	5.000	5.500	-	-	-
4	0.000	15.000	5.500	-	-	-

Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - conn plate type 1	Date:	1/7/2021
Fastening point:			

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**7 Remarks; Your Cooperation Duties**

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- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.

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Company:		Page:	1
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

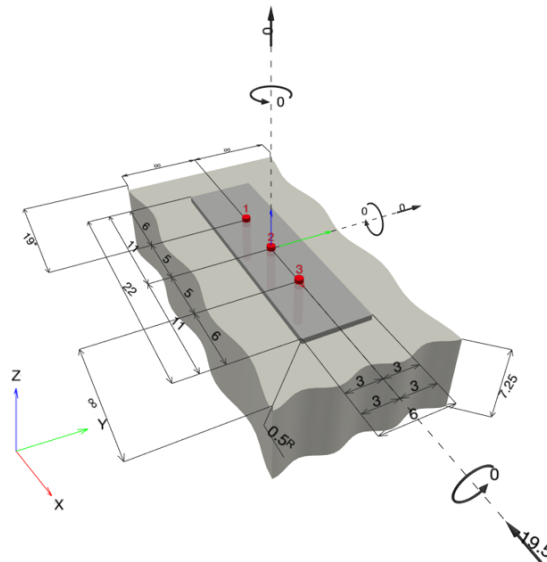
**Specifier's comments:**

**1 Input data**

<b>Anchor type and diameter:</b>	<b>Kwik Bolt TZ - SS 304 3/4 (3 3/4)</b>	
Item number:	not available	
Effective embedment depth:	$h_{ef,act} = 3.750$ in., $h_{nom} = 4.313$ in.	
Material:	AISI 304	
Evaluation Service Report:	ESR-1917	
Issued   Valid:	1/1/2020   5/1/2021	
Proof:	Design Method ACI 318-14 / Mech	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.	
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 22.000$ in. x $6.000$ in. x $0.500$ in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 5000, $f'_c = 5,000$ psi; $h = 7.250$ in.	
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: > No. 4 bar	
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))	

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

**Geometry [in.] & Loading [kip, ft.kip]**



Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:		Page:	2
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

**1.1 Design results**

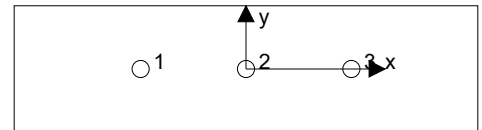
Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 0.000; V <sub>x</sub> = -19.500; V <sub>y</sub> = 0.000; M <sub>x</sub> = 0.00000; M <sub>y</sub> = 0.00000; M <sub>z</sub> = 0.00000;	yes	94

**2 Load case/Resulting anchor forces**

**Anchor reactions [kip]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.000	6.500	-6.500	0.000
2	0.000	6.500	-6.500	0.000
3	0.000	6.500	-6.500	0.000



max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0.000 [kip]  
 resulting compression force in (x/y)=(0.000/0.000): 0.000 [kip]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

**3 Tension load**

	Load N <sub>ua</sub> [kip]	Capacity $\phi$ N <sub>n</sub> [kip]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	N/A	N/A	N/A	N/A

\* highest loaded anchor \*\*anchor group (anchors in tension)

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Company:		Page:	3
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

**4 Shear load**

	Load $V_{ua}$ [kip]	Capacity $\phi V_n$ [kip]	Utilization $\beta_V = V_{ua}/\phi V_n$	Status
Steel Strength*	6.500	8.379	78	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	19.500	32.589	60	OK
Concrete edge failure in direction x-**	19.500	20.752	94	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

**4.1 Steel Strength**

$V_{sa,eq}$  = ESR value      refer to ICC-ES ESR-1917  
 $\phi V_{steel} \geq V_{ua}$       ACI 318-14 Table 17.3.1.1

**Variables**

$A_{se,V}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]	$\alpha_{V,seis}$
0.24	101,500	0.820

**Calculations**

$V_{sa,eq}$ [kip]
12.890

**Results**

$V_{sa,eq}$ [kip]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi V_{sa,eq}$ [kip]	$V_{ua}$ [kip]
12.890	0.650	1.000	8.379	6.500

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Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp,g} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1b)}$$

$$\phi V_{cp,g} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	3.750	0.000	0.000	19.000
$\psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
1.000	10.000	24	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [kip]
239.06	126.56	1.000	1.000	1.000	1.000	12.324

**Results**

$V_{cp,g}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp,g}$ [kip]	$V_{ua}$ [kip]
46.556	0.700	1.000	1.000	32.589	19.500

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Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

**4.3 Concrete edge failure in direction x-**

$$V_{cbg} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1b)}$$

$$\phi V_{cbg} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ec,V} = \left( \frac{1}{1 + \frac{2e_v}{3c_{a1}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.5)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 7 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.2a)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$e_{cV}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]
19.000	-	0.000	1.200	7.250
$l_e$ [in.]	$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\Psi_{parallel,V}$
3.750	1.000	0.750	5,000	1.000

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [kip]
413.25	1,624.50	1.000	1.000	1.983	48.982

**Results**

$V_{cbg}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cbg}$ [kip]	$V_{ua}$ [kip]
29.646	0.700	1.000	1.000	20.752	19.500

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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

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**5 Warnings**

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_0$ .
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-14, Section 17.8.1.

**Fastening meets the design criteria!**

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Company:		Page:	7
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

**6 Installation data**

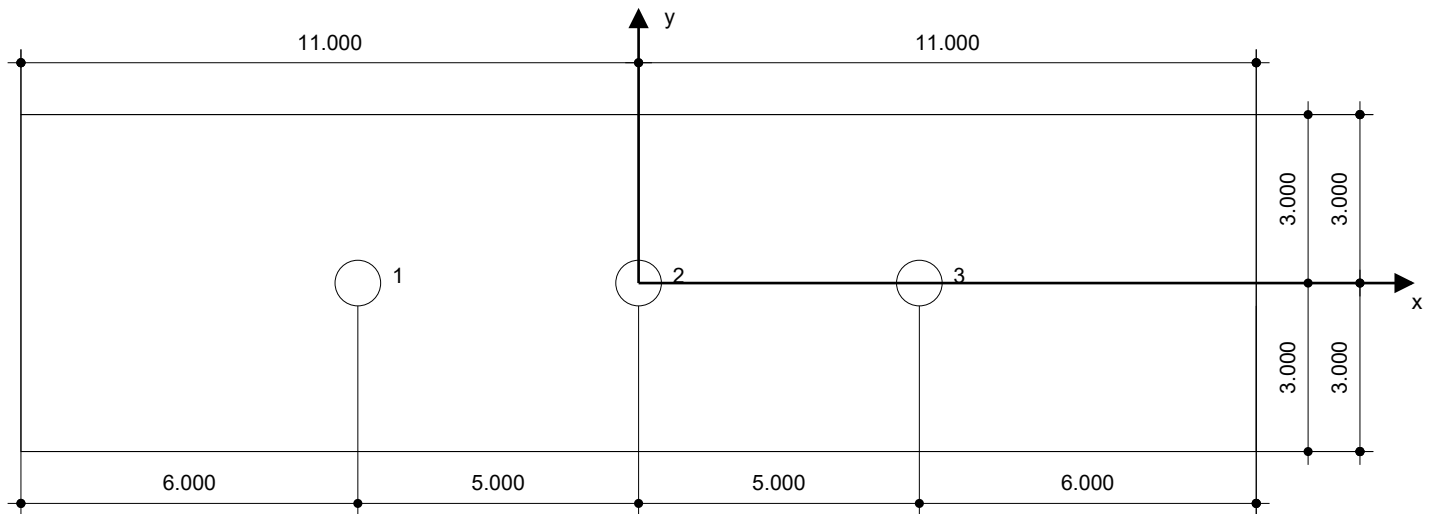
Profile: no profile  
 Hole diameter in the fixture:  $d_f = 0.812$  in.  
 Plate thickness (input): 0.500 in.  
 Recommended plate thickness: not calculated  
 Drilling method: Hammer drilled  
 Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.

Anchor type and diameter: Kwik Bolt TZ - SS 304 3/4 (3/4)  
 Item number: not available  
 Installation torque: 0.11000 ft.kip  
 Hole diameter in the base material: 0.750 in.  
 Hole depth in the base material: 4.500 in.  
 Minimum thickness of the base material: 6.000 in.

Hilti KB-TZ stud anchor with 4.31252 in embedment, 3/4 (3 3/4), Stainless steel, installation per ESR-1917

**6.1 Recommended accessories**

<b>Drilling</b>	<b>Cleaning</b>	<b>Setting</b>
<ul style="list-style-type: none"> <li>• Suitable Rotary Hammer</li> <li>• Properly sized drill bit</li> </ul>	<ul style="list-style-type: none"> <li>• Manual blow-out pump</li> </ul>	<ul style="list-style-type: none"> <li>• Torque wrench</li> <li>• Hammer</li> </ul>



**Coordinates Anchor [in.]**

Anchor	x	y	c <sub>-x</sub>	c <sub>+x</sub>	c <sub>-y</sub>	c <sub>+y</sub>
1	-5.000	-0.000	19.000	-	-	-
2	0.000	-0.000	24.000	-	-	-
3	5.000	-0.000	29.000	-	-	-

Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 1 Moment	Date:	1/7/2021
Fastening point:			

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**7 Remarks; Your Cooperation Duties**

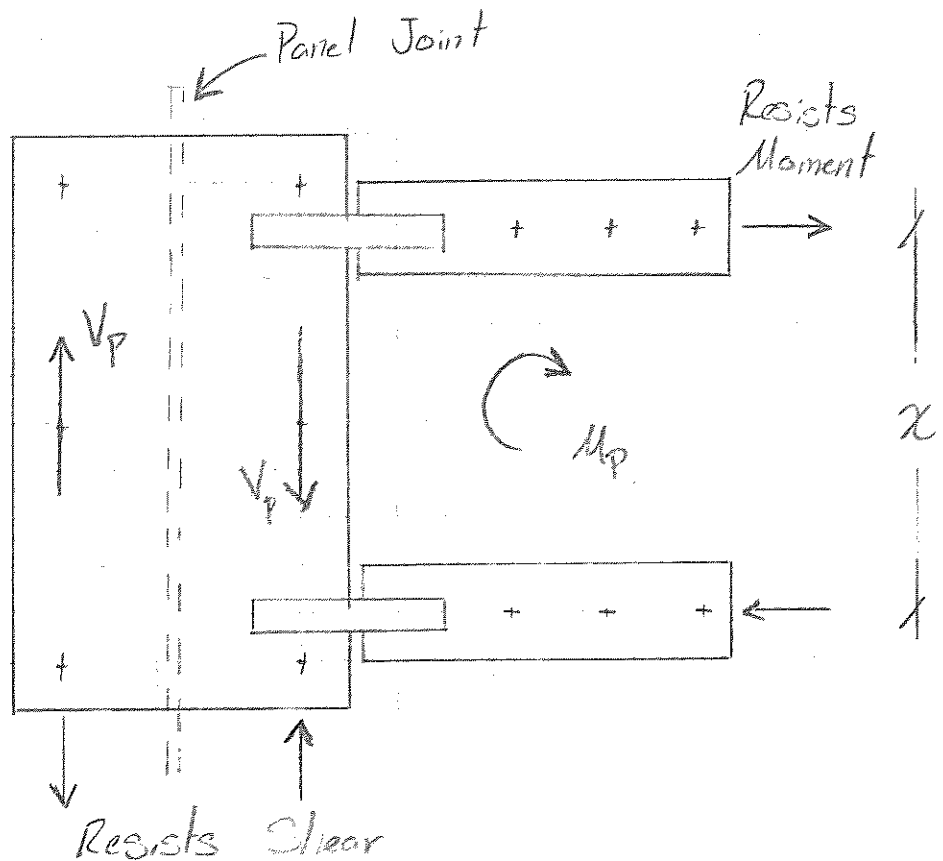
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## WALL PANEL CONNECTION TYPE 2

Maximum Connection plate moment  
per AISC Model

$$V_p = 15 \text{ k} ; M_p = 15 \text{ k-ft}$$

Overstrength,  $\Omega = 2.5$



$$\text{Force to shear resisting plates} = \Omega V_p = 37.5 \text{ k}$$


$$\begin{aligned} \text{Force to moment resisting plates} &= \frac{\Sigma M_p}{x} \\ &= \frac{2.5 (15 \text{ k-ft})}{(2.5 \text{ ft})} = 15 \text{ k} \end{aligned}$$

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Company:		Page:	1
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

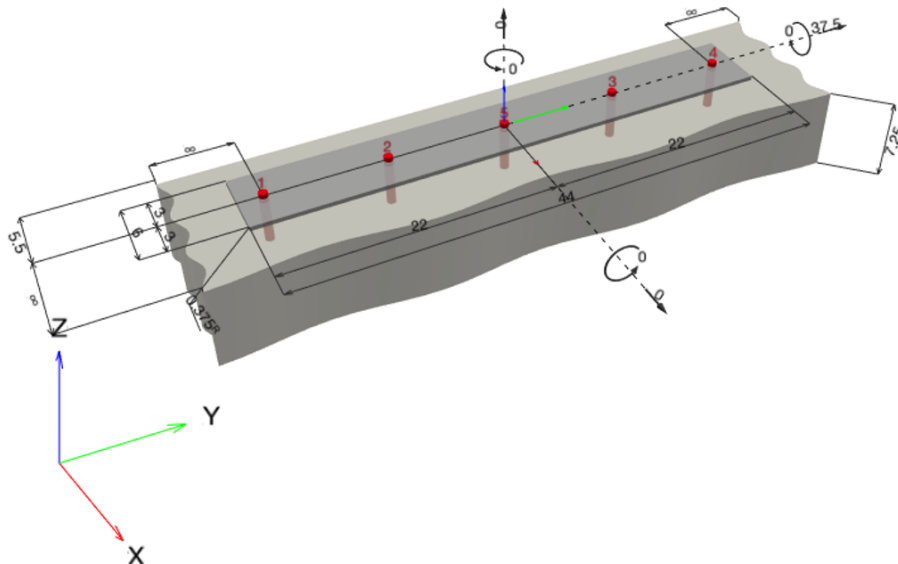
**Specifier's comments:**

**1 Input data**

<b>Anchor type and diameter:</b>	<b>Kwik Bolt TZ - SS 304 3/4 (3 3/4)</b>	
Item number:	not available	
Effective embedment depth:	$h_{ef,act} = 3.750$ in., $h_{nom} = 4.313$ in.	
Material:	AISI 304	
Evaluation Service Report:	ESR-1917	
Issued   Valid:	1/1/2020   5/1/2021	
Proof:	Design Method ACI 318-14 / Mech	
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.375$ in.	
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 6.000$ in. x $44.000$ in. x $0.375$ in.; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 5000, $f'_c = 5,000$ psi; $h = 7.250$ in.	
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>	
Reinforcement:	tension: condition A, shear: condition A; no supplemental splitting reinforcement present	
	edge reinforcement: > No. 4 bar	
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d))	
	Shear load: yes (17.2.3.5.3 (c))	

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

**Geometry [in.] & Loading [kip, ft.kip]**



Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:		Page:	2
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

**1.1 Design results**

Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 0.000; V <sub>x</sub> = 0.000; V <sub>y</sub> = 37.500; M <sub>x</sub> = 0.00000; M <sub>y</sub> = 0.00000; M <sub>z</sub> = 0.00000;	yes	90

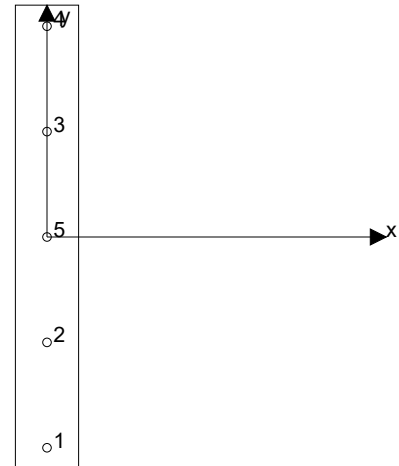
**2 Load case/Resulting anchor forces**

**Anchor reactions [kip]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.000	7.500	0.000	7.500
2	0.000	7.500	0.000	7.500
3	0.000	7.500	0.000	7.500
4	0.000	7.500	0.000	7.500
5	0.000	7.500	0.000	7.500

max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0.000 [kip]  
 resulting compression force in (x/y)=(0.000/0.000): 0.000 [kip]



Anchor forces are calculated based on the assumption of a rigid anchor plate.

**3 Tension load**

	Load N <sub>ua</sub> [kip]	Capacity $\phi$ N <sub>n</sub> [kip]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	N/A	N/A	N/A	N/A

\* highest loaded anchor    \*\*anchor group (anchors in tension)

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Company:	Page: 3
Address:	Specifier:
Phone   Fax:	E-Mail:
Design: south hill mall - Conn plate type 2	Date: 1/7/2021
Fastening point:	

**4 Shear load**

	Load $V_{ua}$ [kip]	Capacity $\phi V_n$ [kip]	Utilization $\beta_V = V_{ua} / \phi V_n$	Status
Steel Strength*	7.500	8.379	90	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	37.500	77.207	49	OK
Concrete edge failure in direction x-**	37.500	44.079	86	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

**4.1 Steel Strength**

$V_{sa,eq}$  = ESR value      refer to ICC-ES ESR-1917  
 $\phi V_{steel} \geq V_{ua}$       ACI 318-14 Table 17.3.1.1

**Variables**

$A_{se,V}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]	$\alpha_{V,seis}$
0.24	101,500	0.820

**Calculations**

$V_{sa,eq}$ [kip]	12.890
-------------------	--------

**Results**

$V_{sa,eq}$ [kip]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi V_{sa,eq}$ [kip]	$V_{ua}$ [kip]
12.890	0.650	1.000	8.379	7.500

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Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp,g} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1b)}$$

$$\phi V_{cp,g} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	3.750	0.000	0.000	5.500
$\psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f_c$ [psi]
1.000	10.000	24	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [kip]
570.16	126.56	1.000	1.000	0.993	1.000	12.324

**Results**

$V_{cp,g}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp,g}$ [kip]	$V_{ua}$ [kip]
110.295	0.700	1.000	1.000	77.207	37.500

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Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

**4.3 Concrete edge failure in direction x-**

$$V_{cbg} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1b)}$$

$$\phi V_{cbg} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ec,V} = \left( \frac{1}{1 + \frac{2e_v}{3c_{a1}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.5)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 7 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.2a)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$e_{cV}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]
5.500	-	0.000	1.200	7.250
$l_e$ [in.]	$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\Psi_{parallel,V}$
3.750	1.000	0.750	5,000	2.000

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [kip]
409.62	136.12	1.000	1.000	1.067	7.629

**Results**

$V_{cbg}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cbg}$ [kip]	$V_{ua}$ [kip]
58.772	0.750	1.000	1.000	44.079	37.500

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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

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**5 Warnings**

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- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_0$ .
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-14, Section 17.8.1.

**Fastening meets the design criteria!**



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Company:		Page:	7
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

**6 Installation data**

Profile: no profile  
 Hole diameter in the fixture:  $d_f = 0.812$  in.  
 Plate thickness (input): 0.375 in.  
 Recommended plate thickness: not calculated  
 Drilling method: Hammer drilled  
 Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.

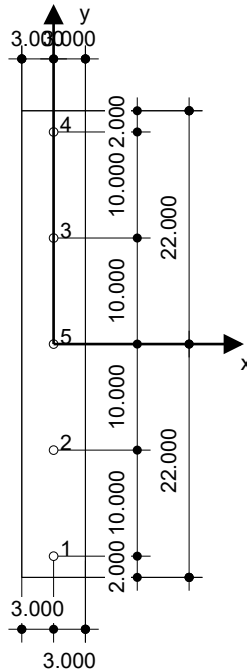
Anchor type and diameter: Kwik Bolt TZ - SS 304 3/4 (3/4)

Item number: not available  
 Installation torque: 0.11000 ft.kip  
 Hole diameter in the base material: 0.750 in.  
 Hole depth in the base material: 4.500 in.  
 Minimum thickness of the base material: 6.000 in.

Hilti KB-TZ stud anchor with 4.31252 in embedment, 3/4 (3 3/4), Stainless steel, installation per ESR-1917

**6.1 Recommended accessories**

Drilling	Cleaning	Setting
<ul style="list-style-type: none"> <li>• Suitable Rotary Hammer</li> <li>• Properly sized drill bit</li> </ul>	<ul style="list-style-type: none"> <li>• Manual blow-out pump</li> </ul>	<ul style="list-style-type: none"> <li>• Torque wrench</li> <li>• Hammer</li> </ul>



Coordinates Anchor [in.]

Anchor	x	y	C <sub>-x</sub>	C <sub>+x</sub>	C <sub>-y</sub>	C <sub>+y</sub>	Anchor	x	y	C <sub>-x</sub>	C <sub>+x</sub>	C <sub>-y</sub>	C <sub>+y</sub>
1	-0.000	-20.000	5.500	-	-	-	4	-0.000	20.000	5.500	-	-	-
2	-0.000	-10.000	5.500	-	-	-	5	-0.000	0.000	5.500	-	-	-
3	-0.000	10.000	5.500	-	-	-							

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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	south hill mall - Conn plate type 2	Date:	1/7/2021
Fastening point:			

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**7 Remarks; Your Cooperation Duties**

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Company:  
 Address:  
 Phone | Fax: |  
 Design: South Hill Mall - Conn Plate Type 2 Moment  
 Fastening point:

Page: 1  
 Specifier:  
 E-Mail:  
 Date: 1/7/2021

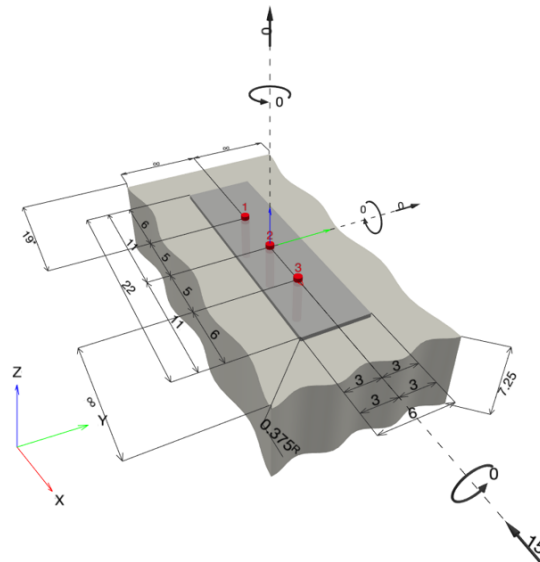
**Specifier's comments:**

**1 Input data**

<b>Anchor type and diameter:</b>	<b>Kwik Bolt TZ - SS 304 3/4 (3 3/4)</b>	
Item number:	not available	
Effective embedment depth:	$h_{ef,act} = 3.750 \text{ in.}, h_{nom} = 4.313 \text{ in.}$	
Material:	AISI 304	
Evaluation Service Report:	ESR-1917	
Issued   Valid:	1/1/2020   5/1/2021	
Proof:	Design Method ACI 318-14 / Mech	
Stand-off installation:	$e_b = 0.000 \text{ in.}$ (no stand-off); $t = 0.375 \text{ in.}$	
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 22.000 \text{ in.} \times 6.000 \text{ in.} \times 0.375 \text{ in.}$ ; (Recommended plate thickness: not calculated)	
Profile:	no profile	
Base material:	cracked concrete, 5000, $f'_c = 5,000 \text{ psi}$ ; $h = 7.250 \text{ in.}$	
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: > No. 4 bar	
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))	

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

**Geometry [in.] & Loading [kip, ft.kip]**



Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:		Page:	2
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

**1.1 Design results**

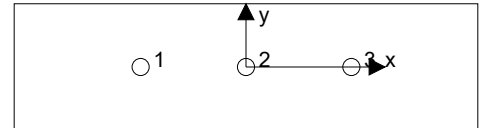
Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 0.000; V <sub>x</sub> = -15.000; V <sub>y</sub> = 0.000; M <sub>x</sub> = 0.00000; M <sub>y</sub> = 0.00000; M <sub>z</sub> = 0.00000;	yes	73

**2 Load case/Resulting anchor forces**

**Anchor reactions [kip]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.000	5.000	-5.000	0.000
2	0.000	5.000	-5.000	0.000
3	0.000	5.000	-5.000	0.000



max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0.000 [kip]  
 resulting compression force in (x/y)=(0.000/0.000): 0.000 [kip]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

**3 Tension load**

	Load N <sub>ua</sub> [kip]	Capacity $\phi N_n$ [kip]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	N/A	N/A	N/A	N/A

\* highest loaded anchor \*\*anchor group (anchors in tension)

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Company:		Page:	3
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

## 4 Shear load

	Load $V_{ua}$ [kip]	Capacity $\phi V_n$ [kip]	Utilization $\beta_V = V_{ua} / \phi V_n$	Status
Steel Strength*	5.000	8.379	60	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	15.000	32.589	47	OK
Concrete edge failure in direction x-**	15.000	20.752	73	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

### 4.1 Steel Strength

$V_{sa,eq}$  = ESR value      refer to ICC-ES ESR-1917  
 $\phi V_{steel} \geq V_{ua}$       ACI 318-14 Table 17.3.1.1

#### Variables

$A_{se,V}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]	$\alpha_{V,seis}$
0.24	101,500	0.820

#### Calculations

$V_{sa,eq}$ [kip]
12.890

#### Results

$V_{sa,eq}$ [kip]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi V_{sa,eq}$ [kip]	$V_{ua}$ [kip]
12.890	0.650	1.000	8.379	5.000

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Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp,g} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1b)}$$

$$\phi V_{cp,g} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	3.750	0.000	0.000	19.000
$\psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
1.000	10.000	24	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [kip]
239.06	126.56	1.000	1.000	1.000	1.000	12.324

**Results**

$V_{cp,g}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp,g}$ [kip]	$V_{ua}$ [kip]
46.556	0.700	1.000	1.000	32.589	15.000

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Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

**4.3 Concrete edge failure in direction x-**

$$V_{cbg} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1b)}$$

$$\phi V_{cbg} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ec,V} = \left( \frac{1}{1 + \frac{2e_v}{3c_{a1}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.5)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 7 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.2a)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$e_{cV}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]
19.000	-	0.000	1.200	7.250
$l_e$ [in.]	$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\Psi_{parallel,V}$
3.750	1.000	0.750	5,000	1.000

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [kip]
413.25	1,624.50	1.000	1.000	1.983	48.982

**Results**

$V_{cbg}$ [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cbg}$ [kip]	$V_{ua}$ [kip]
29.646	0.700	1.000	1.000	20.752	15.000

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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

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**5 Warnings**

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_0$ .
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-14, Section 17.8.1.

**Fastening meets the design criteria!**



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Company:		Page:	7
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

**6 Installation data**

Profile: no profile

Hole diameter in the fixture:  $d_f = 0.812$  in.

Plate thickness (input): 0.375 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.

Anchor type and diameter: Kwik Bolt TZ - SS 304 3/4 (3 3/4)

Item number: not available

Installation torque: 0.11000 ft.kip

Hole diameter in the base material: 0.750 in.

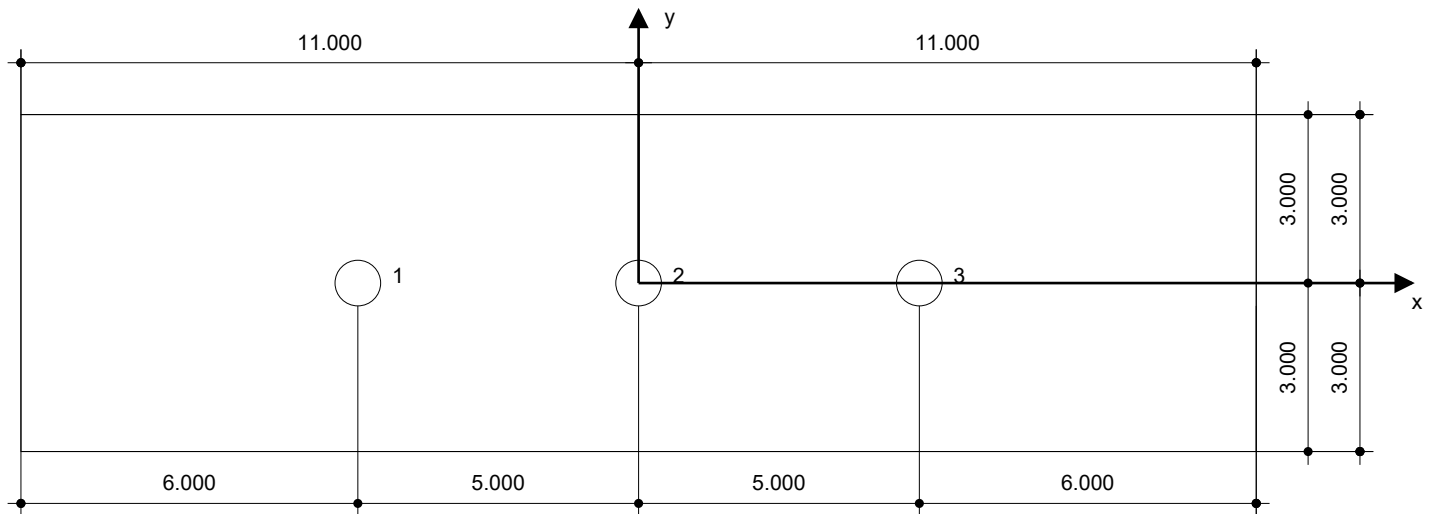
Hole depth in the base material: 4.500 in.

Minimum thickness of the base material: 6.000 in.

Hilti KB-TZ stud anchor with 4.31252 in embedment, 3/4 (3 3/4), Stainless steel, installation per ESR-1917

**6.1 Recommended accessories**

Drilling	Cleaning	Setting
<ul style="list-style-type: none"> <li>• Suitable Rotary Hammer</li> <li>• Properly sized drill bit</li> </ul>	<ul style="list-style-type: none"> <li>• Manual blow-out pump</li> </ul>	<ul style="list-style-type: none"> <li>• Torque wrench</li> <li>• Hammer</li> </ul>



**Coordinates Anchor [in.]**

Anchor	x	y	c <sub>-x</sub>	c <sub>+x</sub>	c <sub>-y</sub>	c <sub>+y</sub>
1	-5.000	-0.000	19.000	-	-	-
2	0.000	-0.000	24.000	-	-	-
3	5.000	-0.000	29.000	-	-	-

Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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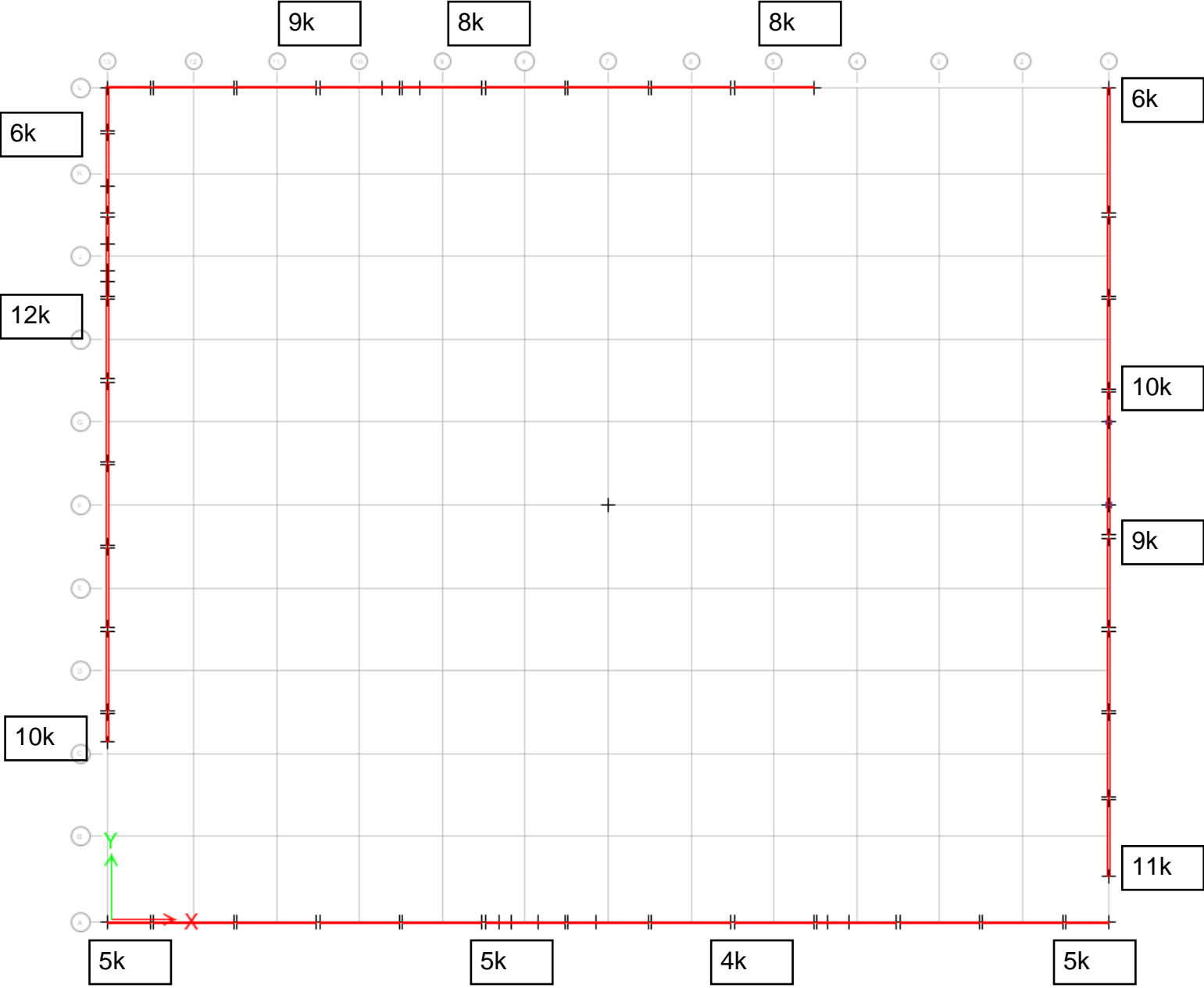
Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	South Hill Mall - Conn Plate Type 2 Moment	Date:	1/7/2021
Fastening point:			

**7 Remarks; Your Cooperation Duties**

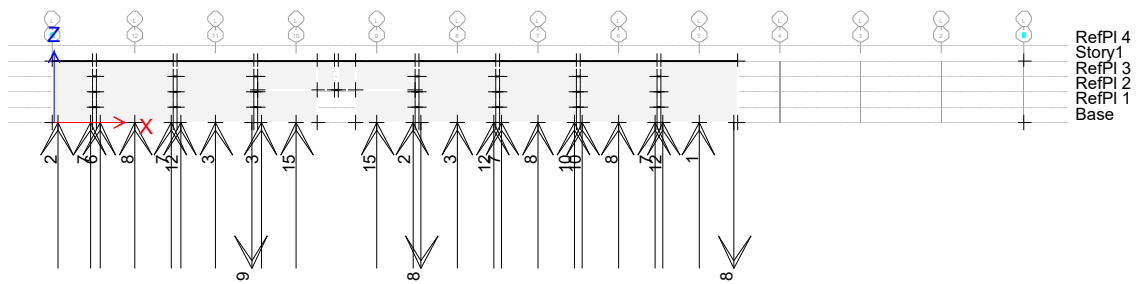
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## **PANEL BASE CONNECTION**

ETABS MODEL WALL PANEL ANCHOR FORCES

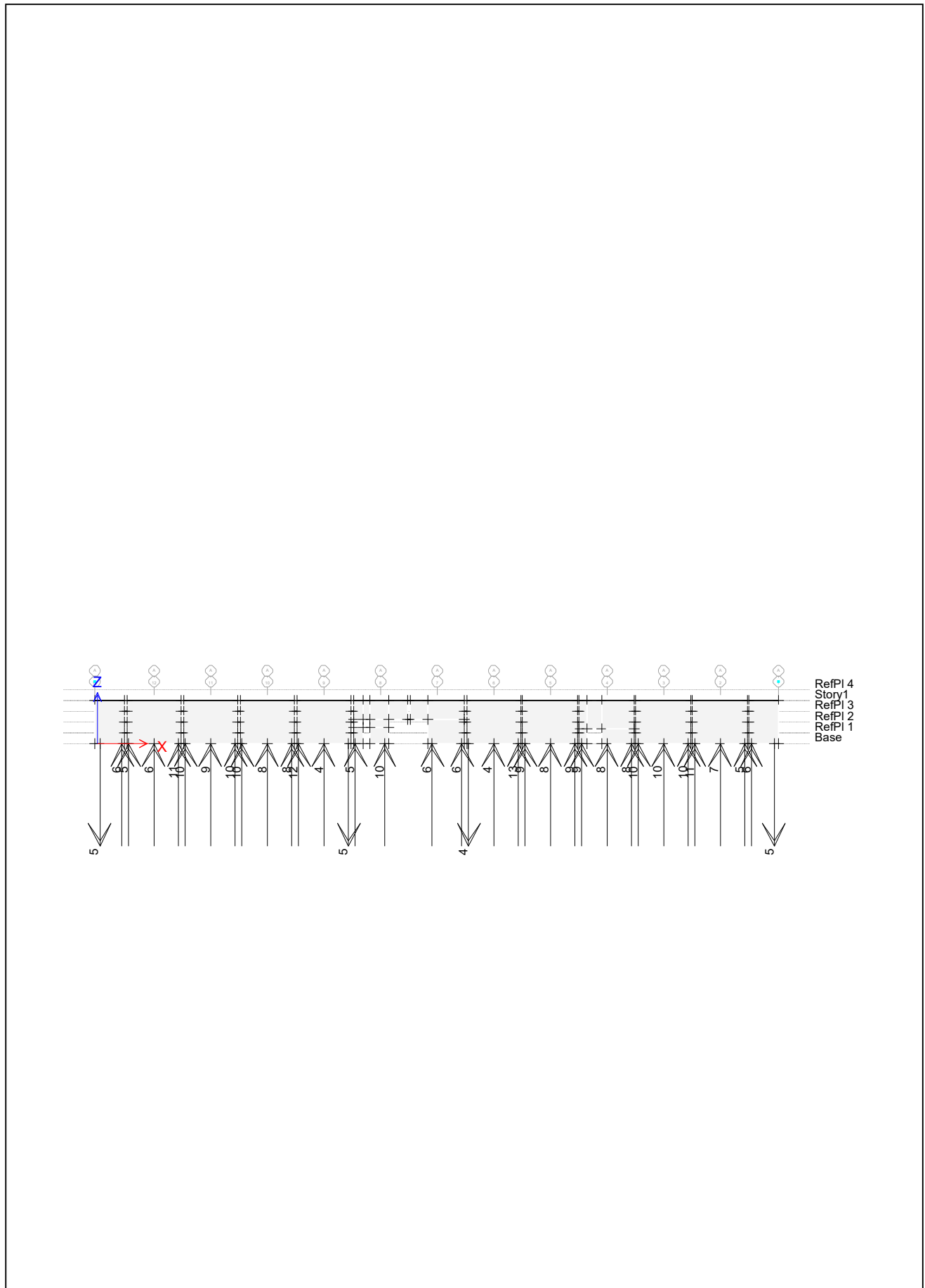


Maximum tension forces on wall anchors  
LRFD Envelope



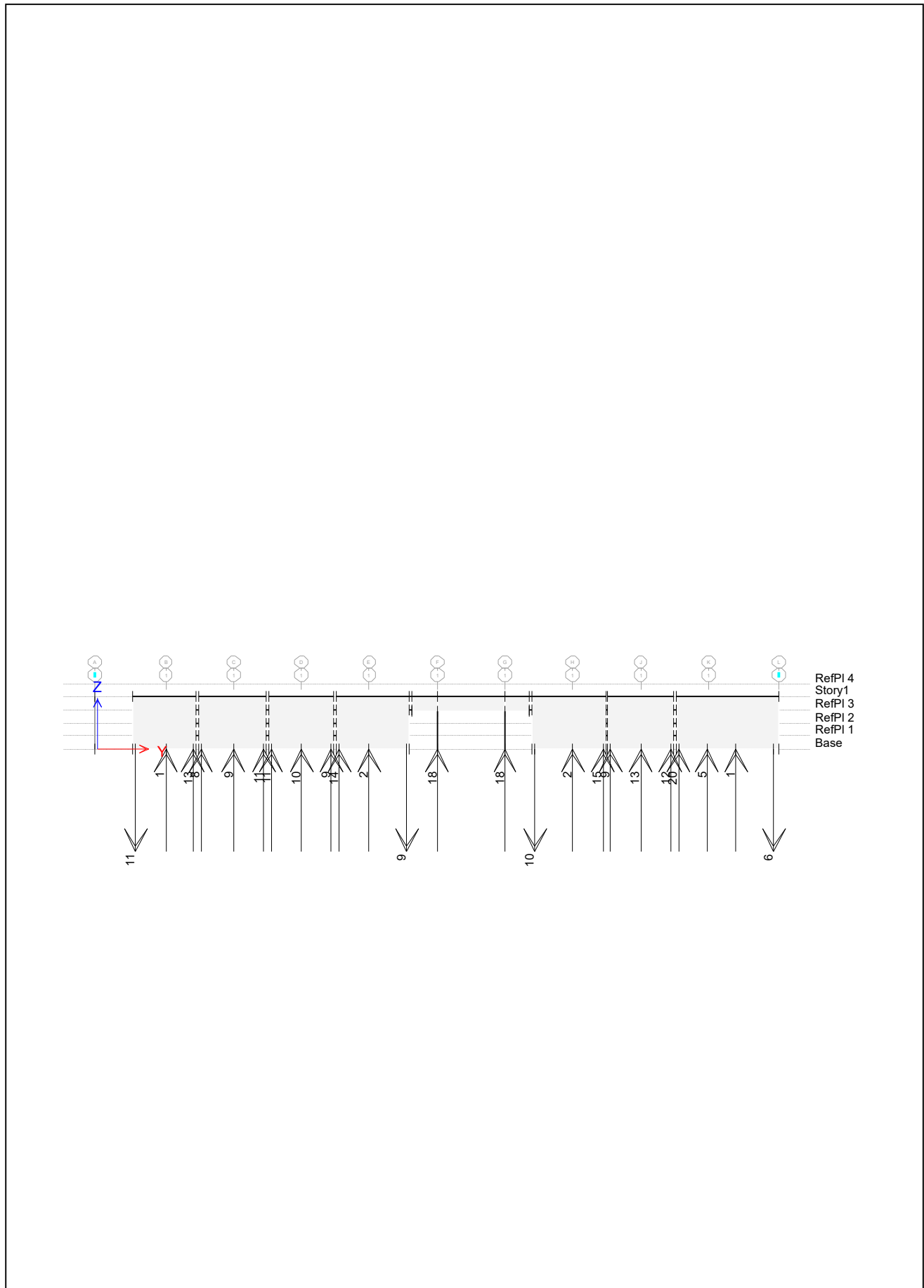
Model-5-19 (semi-rigid) View - L Restraint Reactions (LRFD Envelope) [kip, kip-ft]

**B-19-1101**



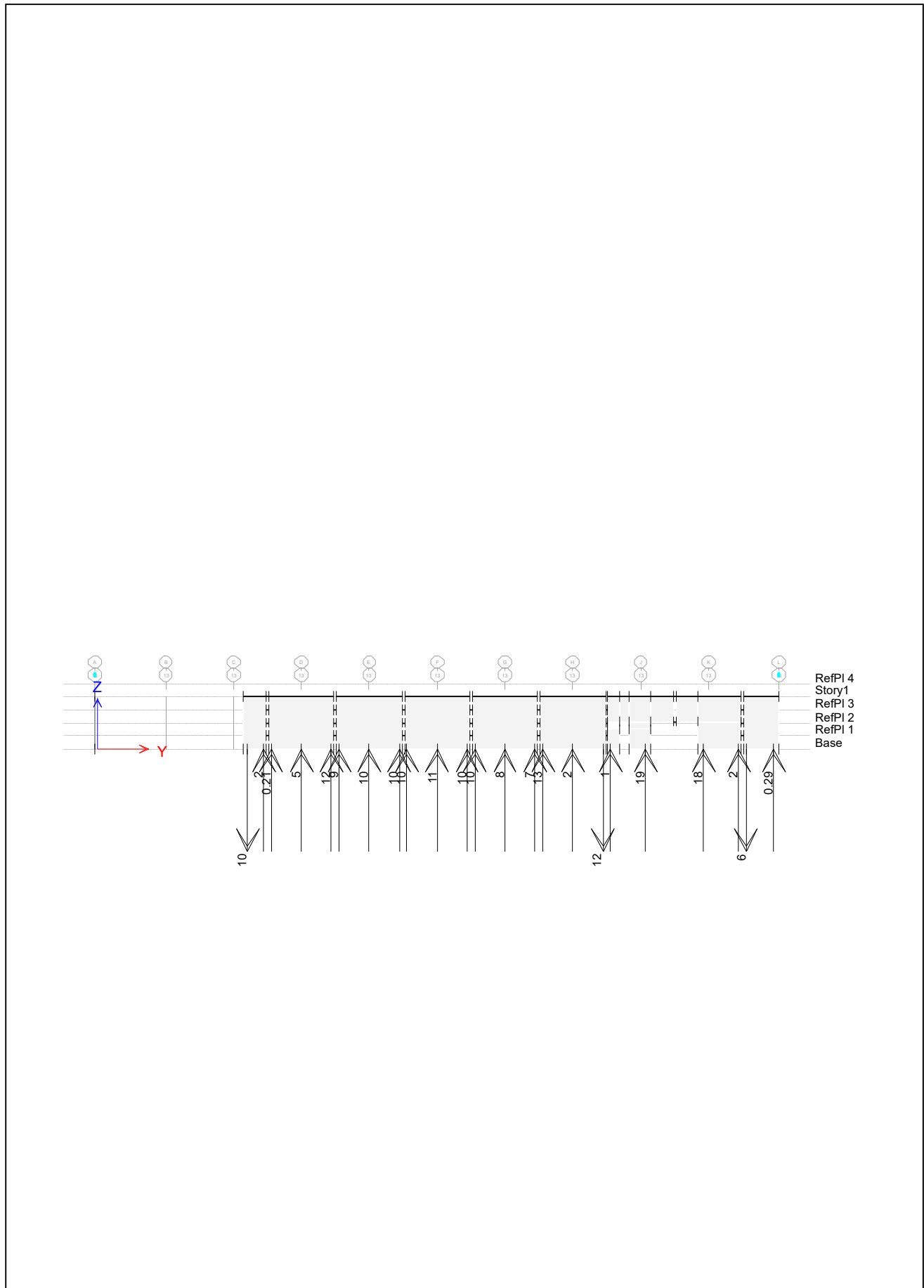
Model-5-19 (semi-rigid) View - A Restraint Reactions (LRFD Envelope) [kip, kip-ft]

**B-19-1101**



Model-5-19 (semi-rigid) View - 1 Restraint Reactions (LRFD Envelope) [kip, kip-ft]

**B-19-1101**

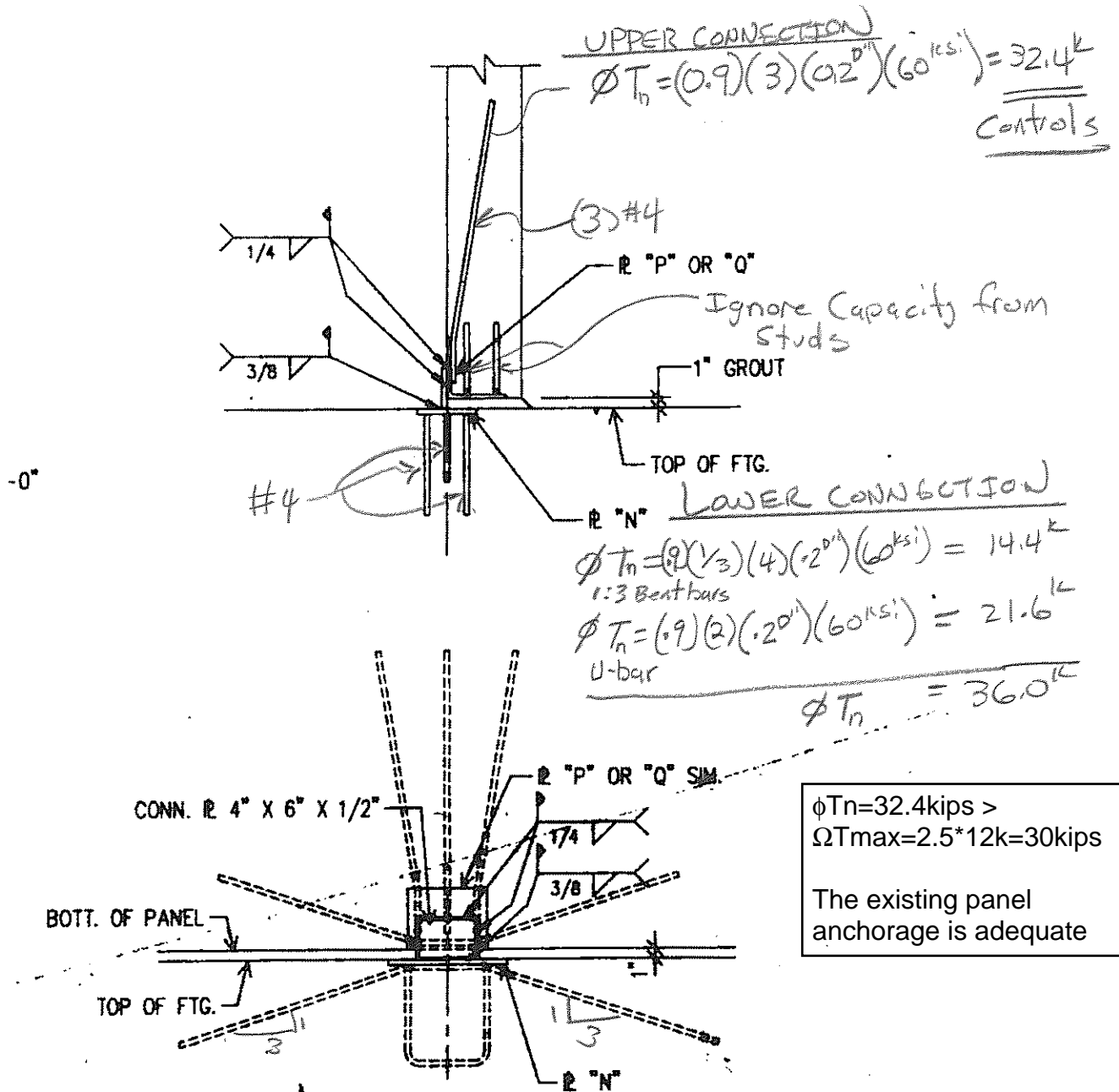


Model-5-19 (semi-rigid) View - 13 Restraint Reactions (LRFD Envelope) [kip, kip-ft]

**B-19-1101**



# TILT PANEL WALL EDGE TENSION CAPACITY



**5** PANEL TO FTG. CONN.  
 NO SCALE

## **DIAPHRAGM ANALYSIS**

Brienen Structural Engineers, P.S.

## Seismic Analysis IBC 2015/ASCE 7-10

\* Intermediate Precast Shear Walls

$$R=4, \quad \Omega = 2.5 - 1/2 = 2.0, \quad C_d = 4$$

↑ Footnote of ASCE 7-10 Table 12.2-1  
\* For flexible diaphragm \*

$$S_{DS} = 0.833$$

$$S_{D1} = 0.486$$

$$I_e = 1.25 \text{ (III)}$$

## Building Period

$$T_a = C_t h_n^x = 0.02 (21.5)^{0.75} = 0.20 \text{ sec}$$

$C_t = 0.02$   
 $h_n = 21.5'$   
 $x = 0.75$

## Seismic Response Coefficient

$$C_s = S_{DS} / (R/I_e) = 0.833 / (4/1.25) = 0.260 \leftarrow \text{Controls}$$

$$C_{s,max} = S_{D1} / T(R/I_e) = 0.486 / [0.2(4/1.25)] = 0.759$$

$T_a = 0.2 \text{ s} < T_c = 6$   
 $> 0.26$

$$C_{s,min} = 0.044 S_{DS} I_e = 0.044 (0.833) (1.25) = 0.046 > 0.01$$

$< 0.26$

$$\underline{\underline{C_s = 0.26}}$$

Brienen Structural Engineers, P.S.

## Roof Diaphragm:

\* Check (E) Diaph For IBC 2015 / ASCE 7-10 Level Loads

$$C_s = 0.26$$

$$W_{N-S} \leftrightarrow = 1993k$$

EQ

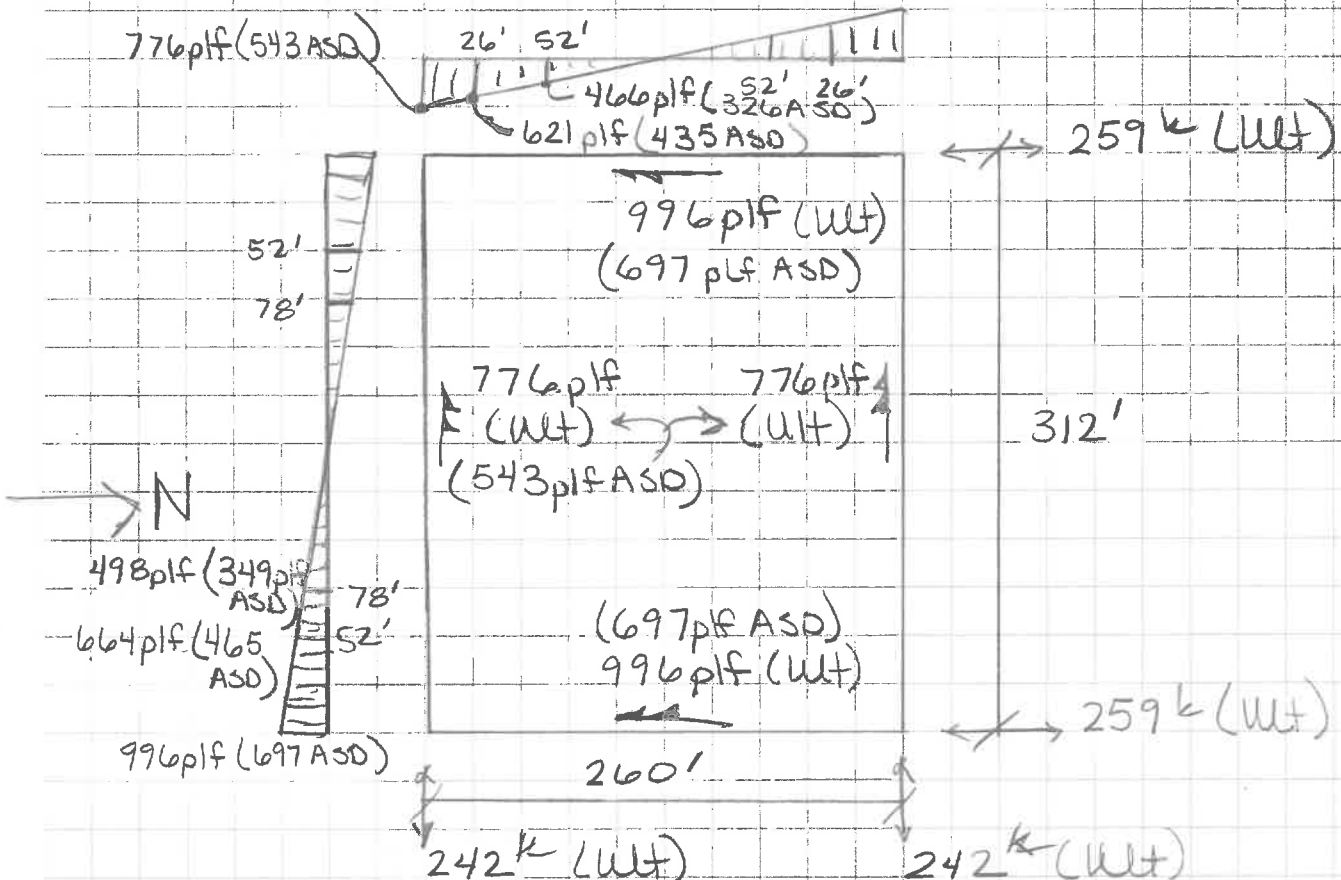
$$W_{E-W} \updownarrow = 1862k$$

EQ

$$V_{N-S \text{ EQ}} = 0.26 (1993k) = 518k \text{ (Ult)}$$

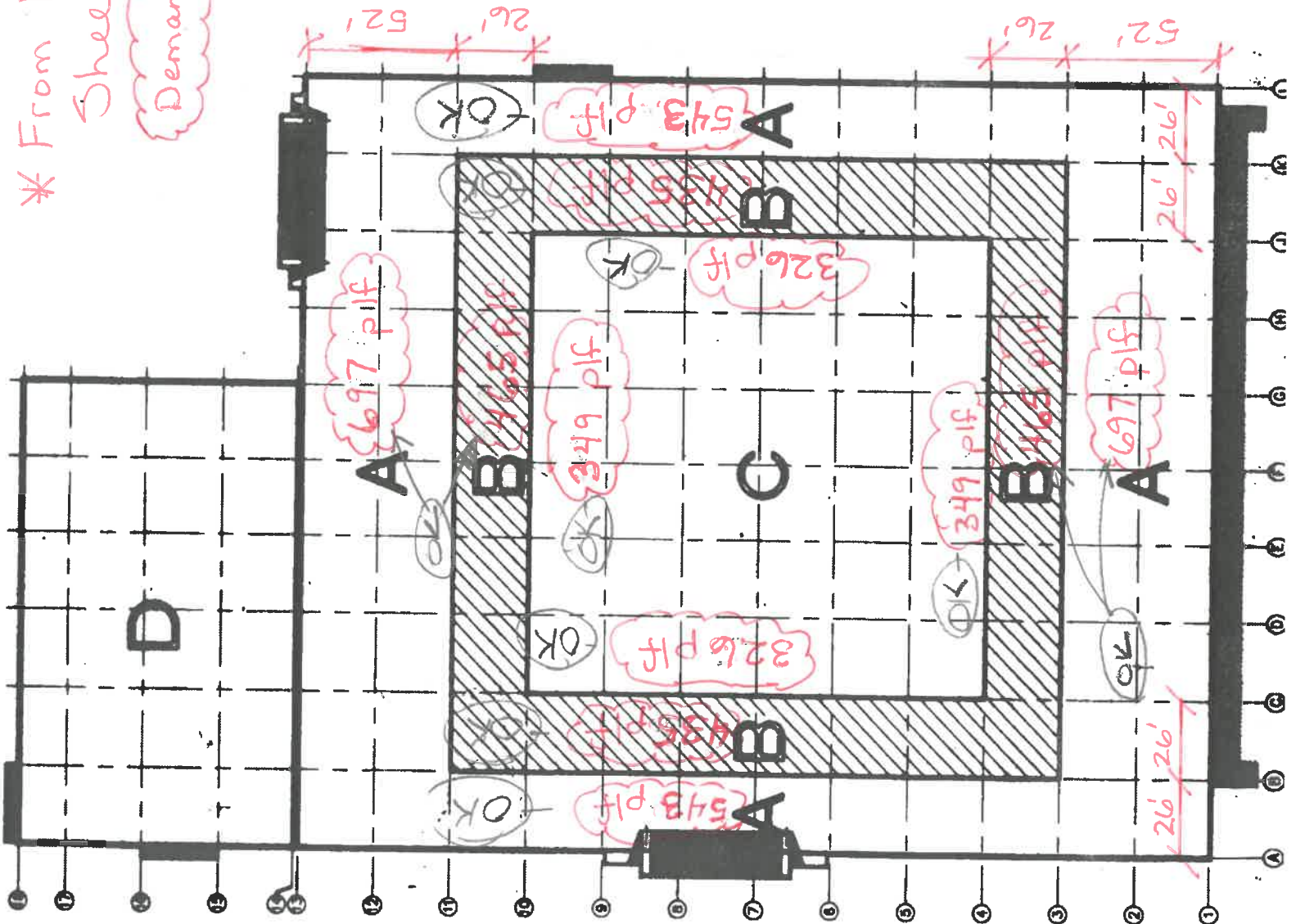
$$V_{E-W \text{ EQ}} = 0.26 (1862k) = 484k \text{ (Ult)}$$

For  
Diaphragms  
Only



\* From 1993 Existing Drawings  
Sheet 55 \*

Demand ASD  
Diaphragm Shear



ROOF DECK NOTES:  
ALL ROOF DECK SHALL BE 22 GAGE, 1 1/2" WIDE RIBBED, PAINTED (LIGHT GRAY PRIMER SEE PAINT SPECS.) VERCO HSB-36 METAL DECK WITH VERCO SHEARTRANTZ (IF REQUIRED TO MEET SHEAR REQUIREMENTS) MINIMUM ATTACHMENTS BELOW FOR DECK TYPES, VERCO OR APPROVED EQUAL.

TYPE "A"  
DECK ATTACHMENT SHALL BE WELDED, WITH SHEARTRANTZ, TO ALL MEMBERS PERPENDICULAR TO DECK SPANS ON WHICH IT BEARS, WITH 7 PUDDLE WELDS PER SHEET, AND TO ALL MEMBERS PARALLEL TO DECK SPAN, WITH PUDDLE WELDS AT 9" O.C., AND WITH 15W @ 24" O.C. SIDE LAP ATTACHMENTS, PATTERN PER MANUFACTURER'S SPECIFICATION, CAPABLE OF DEVELOPING A MINIMUM OF 755 PLF DIAPHRAGM SHEAR.

TYPE "B"  
DECK ATTACHMENT SHALL BE WELDED, WITH SHEARTRANTZ, TO ALL MEMBERS PERPENDICULAR TO DECK SPANS ON WHICH IT BEARS, WITH 7 PUDDLE WELDS PER SHEET, AND TO ALL MEMBERS PARALLEL TO DECK SPAN, WITH PUDDLE WELDS AT 9" O.C., AND WITH BUTTON PUNCHING @ 12" O.C. SIDE LAP ATTACHMENTS, PATTERN PER MANUFACTURER'S SPECIFICATION, CAPABLE OF DEVELOPING A MINIMUM OF 500 PLF DIAPHRAGM SHEAR.

TYPE "C"  
DECK ATTACHMENT SHALL BE WELDED, WITH SHEARTRANTZ, TO ALL MEMBERS PERPENDICULAR TO DECK SPANS ON WHICH IT BEARS, WITH 7 PUDDLE WELDS PER SHEET, AND TO ALL MEMBERS PARALLEL TO DECK SPAN, WITH PUDDLE WELDS AT 12" O.C., AND WITH BUTTON PUNCHING @ 24" O.C. SIDE LAP ATTACHMENTS, PATTERN PER MANUFACTURER'S SPECIFICATION, CAPABLE OF DEVELOPING A MINIMUM OF 450 PLF DIAPHRAGM SHEAR.

TYPE "D"  
DECK ATTACHMENT SHALL BE WELDED, TO ALL MEMBERS PERPENDICULAR TO DECK SPANS ON WHICH IT BEARS, WITH 7 PUDDLE WELDS PER SHEET, AND TO ALL MEMBERS PARALLEL TO DECK SPAN, WITH PUDDLE WELDS AT 18" O.C., AND WITH BUTTON PUNCHING @ 24" O.C. SIDE LAP ATTACHMENTS, PATTERN PER MANUFACTURER'S SPECIFICATION, CAPABLE OF DEVELOPING A MINIMUM OF 300 PLF DIAPHRAGM SHEAR.

WIND UPLIFT ATTACHMENTS:  
ATTACH ROOF DECK FOR 13 PSF MINIMUM WIND UPLIFT OVER THE ENTIRE ROOF AREA.  
ATTACH ROOF DECK FOR 31 PSF WIND UPLIFT AT ALL AREAS WITHIN 10'-0" OF ALL ROOF EDGES AND CHANGES IN BUILDING ELEVATIONS.  
ATTACH ROOF DECK FOR 61 PSF WIND UPLIFT AT ALL AREAS WITHIN 10'-0" EITHER WAY FROM ALL CORNERS.  
SHOP DRAWINGS SHALL SHOW WELDING REQUIREMENTS.

\* (E) Diaphragm has adequate capacity For IBC 2016 / ASCE 7-10 Loads \*



Brienen Structural Engineers, P.S.

## Out-of-Plane: (Anchorage)

$$S_{os} = 0.833$$

$$I_e = 1.25$$

Seismic:

$$F_{p_{wall}} = 0.4 S_{os} I_e W_p \text{ (Wall)}$$

$$F_{p_{Anchor}} = 0.4 S_{os} k_a I_e W_p \text{ (Anchorage \& Diaph.)}$$

$$F_{p_{min}} = 0.2 k_a I_e W_p$$

$$k_a = 1.0 + (L_p / 100) \leq 2.0$$

$$\leftrightarrow k_a = 1.0 + (312' / 100) = 4.12 \rightarrow 2.0$$

$$\updownarrow k_a = 1.0 + (260' / 100) = 3.6 \rightarrow 2.0$$

$$F_{p_{wall}} = 0.4 (0.833) (1.25) W_p = 0.417 W_p$$

$$F_{p_{Anchor}} = 0.4 (0.833) (2.0) (1.25) W_p = 0.833 W_p$$

$$T_w = 7.25''$$

$$W_{t \text{ Wall}} = 150 \text{ pcf} (7.25'' / 12'') = 90.6 \text{ psf}$$

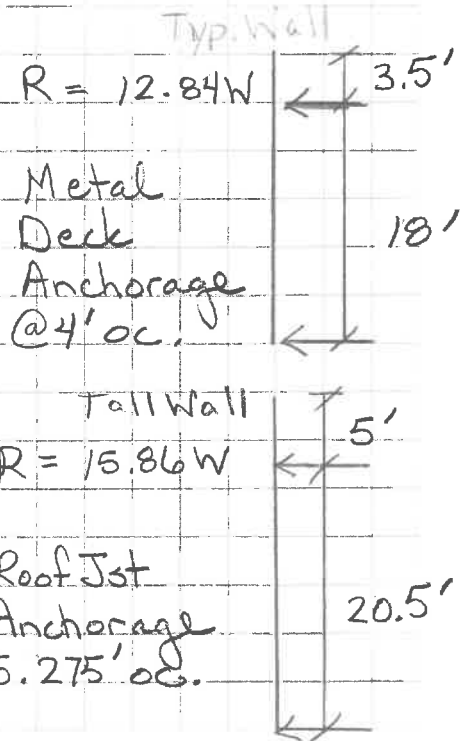
$$4' \text{ Trib} = 90.6 \text{ psf} (4') (12.84') = 4.65^k$$

$$5.28' \text{ Trib} = 90.6 \text{ psf} (5.275') (15.86') = 7.58^k$$

$$F_{p_{Anchor}} = 0.833 (4.65^k) = 3.87^k \text{ (Metal Deck)}$$

$$(UH) = 0.833 (7.58^k) = 6.31^k \text{ (Roof Jst)}$$

$$\uparrow 4.4^k \text{ (ASD)}$$



Brienen Structural Engineers, P.S.

## Check Metal Deck

$$DL = 20 \text{ psf}$$

$$SL = 25 \text{ psf}$$

$$PE = 3.87 \text{ k} \rightarrow (2.7 \text{ k ASD})$$

Load for 4'-0" of Trib. - Assume Cont. Deck Resists Axial Anchorage Force  
 $2.7 \text{ k} / 4' = 675 \#/\text{ft}$   
 $\times 1.4$   
 $\underline{\hspace{1cm}}$   
 $945 \#/\text{ft}$

$$ASD \text{ LC: } 5.1.117D + 0.7E \rho \quad \rho = 1.0$$

$$6b. 1.087D + 0.525E \rho + 0.75L + 0.75S$$

$$8. 0.483D + 0.7E \rho$$

\* Per ASCE 7-10 1.4E for steel elements

## Variables:

$$F_y = 33 \text{ ksi}, \quad F_u = 45 \text{ ksi}$$

$$A = 16.5" (0.0299) = 0.493 \text{ in}^2/\text{ft}$$

$$I = 0.177 \text{ in}^4/\text{ft}$$

$$r = \sqrt{I/A} = 0.599 \text{ in}/\text{ft}$$

$$L = 5.275'$$

## Vert. Bending Loads:

$$\left. \begin{array}{l} W_D = 20 \text{ plf} \\ W_L = 25 \text{ plf} \end{array} \right\} \text{Demand}$$

## Capacity

Allow Load = 128 plf  
 22 Ga - Type B 1/2"  
 5.25' Span  
 Limited by Stress, not deflection

Horz. Axial Loads:

$$F_c = \frac{\pi^2 (29000 \text{ ksi})}{(105.7)^2} = 25.62 \text{ ksi}$$

$$(KL/r) = 1.0 (5.275') (12''/ft) / 0.599 \text{ in} = 105.7 < 200$$

$$\lambda_c = \sqrt{33 \text{ ksi} / 25.62 \text{ ksi}} = 1.135 < 1.5$$

$$F_n = [0.658^{\lambda_c^2}] \times F_y = 19.25 \text{ ksi}$$

$$P_{ne} = A_g F_n = 0.493 \text{ in}^2 (19.25 \text{ ksi}) = 9.49 \text{ k}$$

Combine Bending & Axial (ASD)

Full Load onto 1'-0" of Deck

$$P_{a, ASD} = 0.675 \text{ k} (1.4) = 0.945 \text{ k}$$

↑ ASCE 7-10\*

$$(2.7 \text{ k}) (1.4) = 3.8 \text{ k}$$

$$\Omega P / P_n = 1.80 (0.945 \text{ k}) / 9.49 \text{ k} = 0.179$$

L65	L66b
0.717	0.538

$$1.117 (20 \text{ plf}) / 128 \text{ plf} = 0.175$$

0.175	0.170
-------	-------

$$0.75 (25 \text{ plf}) / 128 \text{ plf} = 0.146$$

-	0.146
---	-------

$$0.5 < 1.0$$

0.89	0.85
------	------

ok

< 1.0	< 1.0
-------	-------

ok      ok

\* Note 1'-0" of Metal deck can resist anchorage force for 4'-0" Trib.

Tension Check:  $T_n / \Omega = 0.493 \text{ in}^2 (33 \text{ ksi}) / 1.67 = 9.74 \text{ k}$

Comp. Cap. ∴

Tension ok



## Check Metal Deck Puddle Welds

$$P_{nv} = \frac{\pi d_e^2}{4} (0.75 F_{xx}) = \frac{\pi (0.5)^2}{4} (0.75)(70 \text{ ksi}) = 10.3 \text{ k}$$

$$P_{nv}/\Omega = 10.3 \text{ k} / 2.55 = 4.04 \text{ k} > 0.945 \text{ k/ft} \text{ (Welds @ 1'-0" o.c.)}$$

↑  
Actually 6" oc.  
7-Pattern at  
each Low Flute

$$d_a = (0.5" - 0.0598") = 0.4402"$$

$$d_a/t = 0.4402" / 0.0598" = 7.361 < 20.69$$

$$0.815 \sqrt{E/F_u} = 0.815 \sqrt{29000/45} = 20.69$$

$$P_{nv} = 2.20 t d_a F_u = 2.20 (0.0598") (0.4402") (45 \text{ ksi}) = 2.61 \text{ k}$$

$$P_{nv}/\Omega = 2.61 \text{ k} / 2.20 = 1.185 \text{ k} > 0.945 \text{ k/ft}$$

ok ↑ Includes 1.4

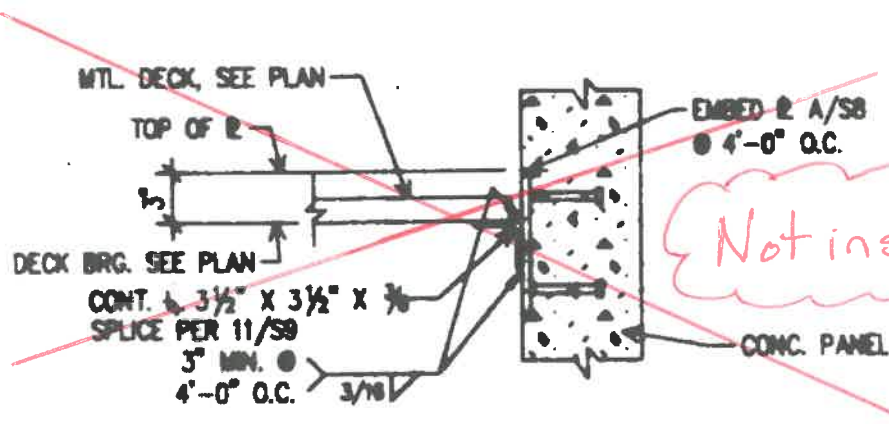
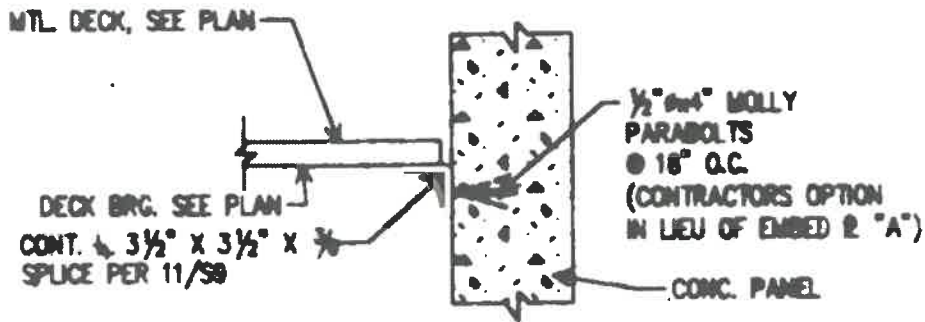
\* Metal Deck Puddle welds can transfer Anchorage force thru discontinuity at ea. sheet, metal deck can act as continuous tie/strut thru full length of building.

\* By Inspection, Puddle welds between wall ledger angle & metal deck are ok.

Anchorage Force =  $0.675 \#/ft (1.5') = 1.0 \text{ kip (ASD)}$   
 $1.5 \text{ k (Ult)}$   
 18" o.c.

\* Anchor Bolts do not require 1.4 increase for steel elements. ASCE 7-10 12.11.2.2.2

In-Plane Shear =  $776 \text{ plf } (1.5') (2) = 2330 \#$   
 $3.0 \text{ k w/}\Omega = 2$



Not installed

## 2 DECK BEARING DETAIL

1'-1'-0"

Try 5/8" φ w/4" Embed

2' o.c. → 3860# (Ult. w/Ω)

3' o.c. → 5790# (Ult w/Ω)

2.5' o.c. → 4825# (Ult w/Ω)

Required for  $f'_c = 3000 \text{ psi}$

Requires  $f'_c = 5000 \text{ psi}$  Existing

See Hilti Calc

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Company:		Page:	1
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

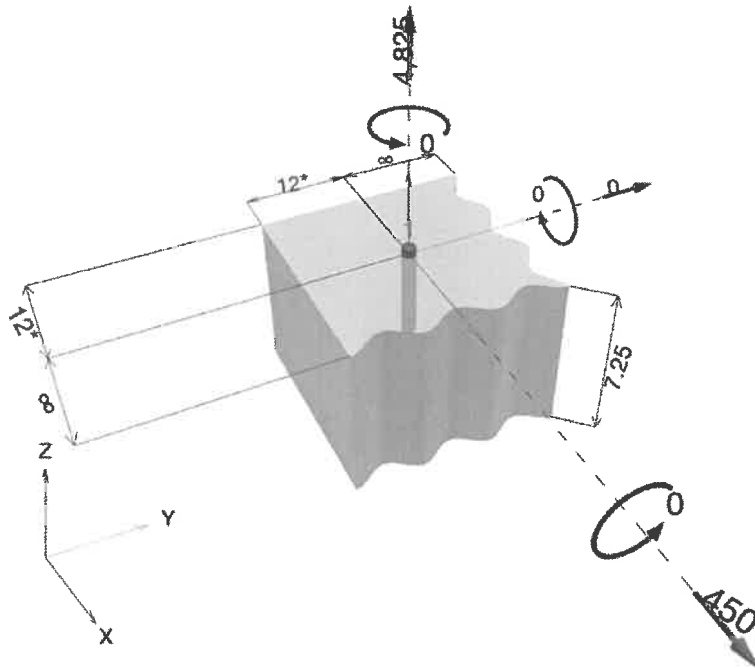
Specifier's comments:

## 1 Input data

<b>Anchor type and diameter:</b>	<b>Kwik Bolt TZ - CS 5/8 (4)</b>
Item number:	not available
Effective embedment depth:	$h_{ef,act} = 4.000$ in., $h_{nom} = 4.438$ in.
Material:	Carbon Steel
Evaluation Service Report:	ESR-1917
Issued   Valid:	1/1/2020   5/1/2021
Proof:	Design Method ACI 318-14 / Mech
Stand-off installation:	
Profile:	
Base material:	cracked concrete, 5000, $f'_c = 5,000$ psi; $h = 7.250$ in.
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))



### Geometry [in.] & Loading [lb, in.lb]



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Company:		Page:	2
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**1.1 Design results**

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 4,825; V <sub>x</sub> = 450; V <sub>y</sub> = 0; M <sub>x</sub> = 0; M <sub>y</sub> = 0; M <sub>z</sub> = 0;	yes	103

**2 Load case/Resulting anchor forces**
**Anchor reactions [lb]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	4,825	450	450	0

max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0 [lb]  
 resulting compression force in (x/y)=(0.000/0.000): 0 [lb]

**3 Tension load**

	Load N <sub>ua</sub> [lb]	Capacity $\phi N_n$ [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	4,825	12,877	38	OK
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	4,825	4,688	103	not recommended

\* highest loaded anchor    \*\*anchor group (anchors in tension)

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Company:		Page:	3
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**3.1 Steel Strength**

$N_{sa}$  = ESR value refer to ICC-ES ESR-1917  
 $\phi N_{sa} \geq N_{ua}$  ACI 318-14 Table 17.3.1.1

**Variables**

$A_{se,N}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]
0.16	106,000

**Calculations**

$N_{sa}$ [lb]
17,170

**Results**

$N_{sa}$ [lb]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi N_{sa}$ [lb]	$N_{ua}$ [lb]
17,170	0.750	1.000	12,877	4,825

**3.2 Concrete Breakout Failure**

$N_{cb} = \left( \frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b$  ACI 318-14 Eq. (17.4.2.1a)  
 $\phi N_{cb} \geq N_{ua}$  ACI 318-14 Table 17.3.1.1  
 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)  
 $A_{Nc0} = 9 h_{ef}^2$  ACI 318-14 Eq. (17.4.2.1c)  
 $\Psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5h_{ef}} \right) \leq 1.0$  ACI 318-14 Eq. (17.4.2.5b)  
 $\Psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}} \right) \leq 1.0$  ACI 318-14 Eq. (17.4.2.7b)  
 $N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$  ACI 318-14 Eq. (17.4.2.2a)

**Variables**

$h_{ef}$ [in.]	$c_{a,min}$ [in.]	$\Psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
4.000	12.000	1.000	8.750	17	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\Psi_{ed,N}$	$\Psi_{cp,N}$	$N_b$ [lb]
144.00	144.00	1.000	1.000	9,617

**Results**

$N_{cb}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi N_{cb}$ [lb]	$N_{ua}$ [lb]
9,617	0.650	0.750	1.000	4,688	4,825

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Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**4 Shear load**

	Load $V_{ua}$ [lb]	Capacity $\phi V_n$ [lb]	Utilization $\beta_v = V_{ua}/\phi V_n$	Status
Steel Strength*	450	4,940	10	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	450	13,463	4	OK
Concrete edge failure in direction y-**	450	17,459	3	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

**4.1 Steel Strength**

$V_{sa,eq}$  = ESR value      refer to ICC-ES ESR-1917  
 $\phi V_{steel} \geq V_{ua}$       ACI 318-14 Table 17.3.1.1

**Variables**

$A_{seV}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]	$\alpha_{V,seis}$
0.16	106,000	0.939

**Calculations**

$V_{sa,eq}$ [lb]
7,600

**Results**

$V_{sa,eq}$ [lb]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi V_{sa,eq}$ [lb]	$V_{ua}$ [lb]
7,600	0.650	1.000	4,940	450

**Hilti PROFIS Engineering 3.0.66**

www.hilti.com

Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1a)}$$

$$\phi V_{cp} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\Psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\Psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$c_{a,min}$ [in.]	$\Psi_{c,N}$
2	4.000	12.000	1.000
$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
8.750	17	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\Psi_{ed,N}$	$\Psi_{cp,N}$	$N_b$ [lb]
144.00	144.00	1.000	1.000	9,617

**Results**

$V_{cp}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp}$ [lb]	$V_{ua}$ [lb]
19,233	0.700	1.000	1.000	13,463	450

**Hilti PROFIS Engineering 3.0.66**

www.hilti.com

Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**4.3 Concrete edge failure in direction y-**

$$V_{cb} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1a)}$$

$$\phi V_{cb} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

$$A_{Vc} \text{ see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)}$$

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 7 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.2a)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]	$l_e$ [in.]
12.000	12.000	1.000	7.250	4.000
$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\Psi_{parallel,V}$	
1.000	0.625	5,000	2.000	

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [lb]
217.50	648.00	1.000	1.576	23,579

**Results**

$V_{cb}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cb}$ [lb]	$V_{ua}$ [lb]
24,941	0.700	1.000	1.000	17,459	450

**5 Combined tension and shear loads**

$\beta_N$	$\beta_V$	$\zeta$	Utilization $\beta_{NV}$ [%]	Status
1.029	0.091	1.000	94	OK

$$\beta_{NV} = (\beta_N + \beta_V) / 1.2 \leq 1$$



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Company:		Page:	7
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**6 Warnings**

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_e$ .
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-14, Section 17.8.1.

**Fastening does not meet the design criteria!**

Fastener is 3% overstressed  
& (E) A.B.'s Provide  
Redundancy - A.B. OK

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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

**7 Installation data**

Profile: -	Anchor type and diameter: Kwik Bolt TZ - CS 5/8 (4)
Hole diameter in the fixture: -	Item number: not available
Plate thickness (input): -	Installation torque: 720 in.lb
	Hole diameter in the base material: 0.625 in.
	Hole depth in the base material: 4.750 in.
Drilling method: Hammer drilled	Minimum thickness of the base material: 6.000 in.
Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.	

Hilti KB-TZ stud anchor with 4.43752 in embedment, 5/8 (4), Carbon steel, installation per ESR-1917

**7.1 Recommended accessories**

Drilling	Cleaning	Setting
<ul style="list-style-type: none"> <li>• Suitable Rotary Hammer</li> <li>• Properly sized drill bit</li> </ul>	<ul style="list-style-type: none"> <li>• Manual blow-out pump</li> </ul>	<ul style="list-style-type: none"> <li>• Torque controlled cordless impact tool</li> <li>• Torque wrench</li> <li>• Hammer</li> </ul>

**Coordinates Anchor in.**

Anchor	x	y	C-x	C+x	C-y	C+y
1	0.000	0.000	12.000	-	12.000	-

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Company:		Page:	9
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	New 5/8" AB IN 5000psi	Date:	1/8/2021
Fastening point:			

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## 8 Remarks; Your Cooperation Duties


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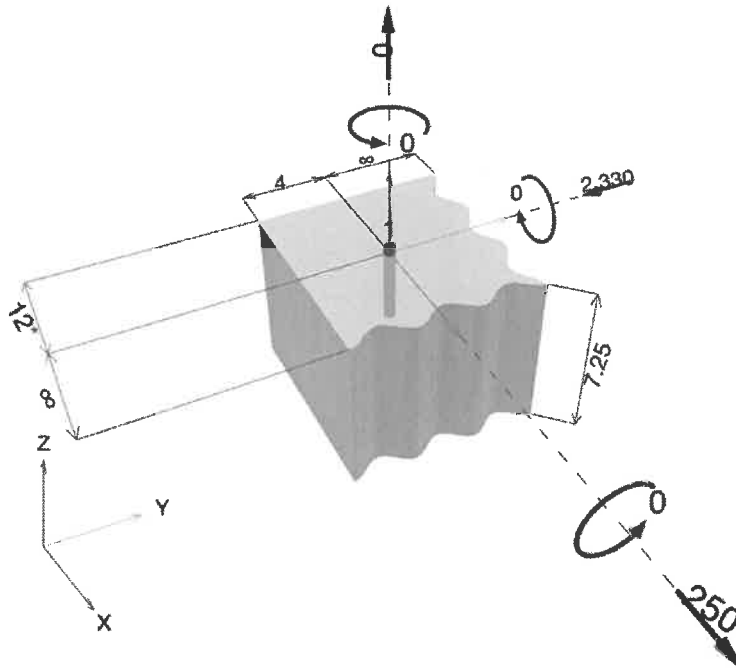
Company:		Page:	1
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(e) 1/2" AB IN 3000psi (in plane shear)	Date:	1/8/2021
Fastening point:			

**Specifier's comments:**

## 1 Input data

<b>Anchor type and diameter:</b>	<b>Kwik Bolt TZ - CS 1/2 (3 1/4)</b>	
Item number:	not available	
Effective embedment depth:	$h_{ef,act} = 3.250$ in., $h_{nom} = 3.625$ in.	
Material:	Carbon Steel	
Evaluation Service Report:	ESR-1917	
Issued   Valid:	1/1/2020   5/1/2021	
Proof:	Design Method ACI 318-14 / Mech	
Stand-off installation:		
Profile:		
Base material:	cracked concrete, 3000, $f'_c = 3,000$ psi; $h = 7.250$ in.	
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>	
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present	
	edge reinforcement: > No. 4 bar	
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d))	
	Shear load: yes (17.2.3.5.3 (c))	

### Geometry [in.] & Loading [lb, in.lb]



Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:	Page:	2
Address:	Specifier:	
Phone   Fax:	E-Mail:	
Design:	Date:	1/8/2021
Fastening point: (e) 1/2" AB IN 3000psi (in plane shear)		

**1.1 Design results**

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 0; V <sub>x</sub> = 250; V <sub>y</sub> = -2,330; M <sub>x</sub> = 0; M <sub>y</sub> = 0; M <sub>z</sub> = 0;	yes	89

**2 Load case/Resulting anchor forces**
**Anchor reactions [lb]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0	2,343	250	-2,330

max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0 [lb]  
 resulting compression force in (x/y)=(0.000/0.000): 0 [lb]

**3 Tension load**

	Load N <sub>ua</sub> [lb]	Capacity $\phi$ N <sub>n</sub> [lb]	Utilization $\beta_N = N_{ua} / \phi N_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	N/A	N/A	N/A	N/A

\* highest loaded anchor    \*\*anchor group (anchors in tension)

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Company: Address: Phone   Fax: Design: Fastening point:	Page: 3 Specifier: E-Mail: Date: 1/8/2021
 (e) 1/2" AB IN 3000psi (in plane shear)	

## 4 Shear load

	Load $V_{ua}$ [lb]	Capacity $\phi V_n$ [lb]	Utilization $\beta_v = V_{ua}/\phi V_n$	Status
Steel Strength*	2,343	3,572	66	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	2,343	6,578	36	OK
Concrete edge failure in direction y-**	2,343	2,649	89	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

### 4.1 Steel Strength

$V_{sa,eq}$  = ESR value      refer to ICC-ES ESR-1917  
 $\phi V_{steel} \geq V_{ua}$       ACI 318-14 Table 17.3.1.1

#### Variables

$A_{se,v}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]	$\alpha_{v,seis}$
0.10	106,000	1.000

#### Calculations

$V_{sa,eq}$ [lb]
5,495

#### Results

$V_{sa,eq}$ [lb]	$\phi_{steel}$	$\phi_{nonductile}$	$\phi V_{sa,eq}$ [lb]	$V_{ua}$ [lb]
5,495	0.650	1.000	3,572	2,343

www.hilti.com

Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(e) 1/2" AB IN 3000psi (in plane shear)	Date:	1/8/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1a)}$$

$$\phi V_{cp} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\Psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\Psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$c_{a,min}$ [in.]	$\Psi_{c,N}$
2	3.250	4.000	1.000

$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
7.500	17	1.000	3,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\Psi_{ed,N}$	$\Psi_{cp,N}$	$N_b$ [lb]
86.53	95.06	0.946	1.000	5,455

**Results**

$V_{cp}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp}$ [lb]	$V_{ua}$ [lb]
9,397	0.700	1.000	1.000	6,578	2,343

www.hilti.com

Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(e) 1/2" AB IN 3000psi (in plane shear)	Date:	1/8/2021
Fastening point:			

**4.3 Concrete edge failure in direction y-**

$$V_{cb} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \psi_{ed,V} \psi_{c,V} \psi_{h,V} \psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1a)}$$

$$\phi V_{cb} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 7 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.2a)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$\psi_{c,V}$	$h_a$ [in.]	$l_e$ [in.]
4.000	12.000	1.200	7.250	3.250
$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\psi_{parallel,V}$	
1.000	0.500	3,000	1.000	

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\psi_{ed,V}$	$\psi_{h,V}$	$V_b$ [lb]
72.00	72.00	1.000	1.000	3,154

**Results**

$V_{cb}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cb}$ [lb]	$V_{ua}$ [lb]
3,784	0.700	1.000	1.000	2,649	2,343



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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(e) 1/2" AB IN 3000psi (in plane shear)	Date:	1/8/2021
Fastening point:			

## 5 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_p$ .
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-14, Section 17.8.1.

**Fastening meets the design criteria!**

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Company:		Page:	7
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(e) 1/2" AB IN 3000psi (in plane shear)	Date:	1/8/2021
Fastening point:			

## 6 Installation data

Profile: -	Anchor type and diameter: Kwik Bolt TZ - CS 1/2 (3 1/4)
Hole diameter in the fixture: -	Item number: not available
Plate thickness (input): -	Installation torque: 480 in.lb
	Hole diameter in the base material: 0.500 in.
	Hole depth in the base material: 4.000 in.
Drilling method: Hammer drilled	Minimum thickness of the base material: 6.000 in.
Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.	

Hilti KB-TZ stud anchor with 3.625 in embedment, 1/2 (3 1/4), Carbon steel, installation per ESR-1917

### 6.1 Recommended accessories

Drilling	Cleaning	Setting
<ul style="list-style-type: none"> <li>• Suitable Rotary Hammer</li> <li>• Properly sized drill bit</li> </ul>	<ul style="list-style-type: none"> <li>• Manual blow-out pump</li> </ul>	<ul style="list-style-type: none"> <li>• Torque controlled cordless impact tool</li> <li>• Torque wrench</li> <li>• Hammer</li> </ul>

#### Coordinates Anchor in.

Anchor	x	y	C <sub>-x</sub>	C <sub>+x</sub>	C <sub>-y</sub>	C <sub>+y</sub>
1	0.000	0.000	12.000	-	4.000	-

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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(e) 1/2" AB IN 3000psi (in plane shear)	Date:	1/8/2021
Fastening point:			

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$$\text{Max Chord Force} = \frac{\left(\frac{518 \text{ k}}{312''}\right) (312'')^2}{8} \div 260' = 77.7 \text{ k} \quad (\text{ult})$$

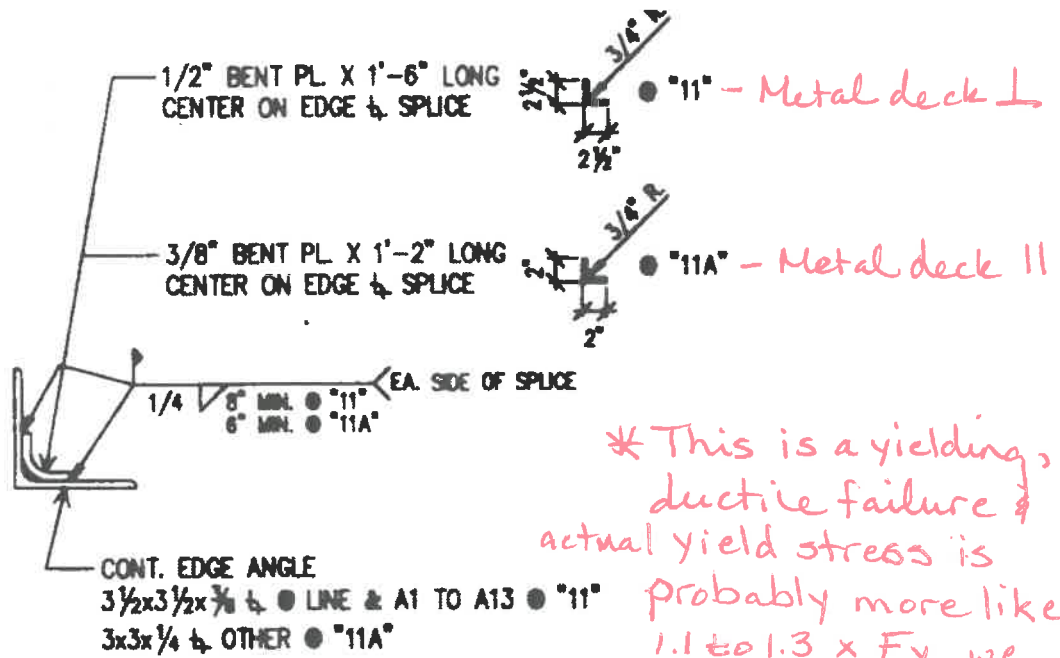
Check Weld:  $\phi R_n = 1.392(4)(8'')(2) = 89 \text{ k} > 78 \text{ k}$   
 " " (6'') " =  $67 \text{ k} > 51 \text{ k}$   
ok

* N-S EQ *
50.4 k
(ult)
* E-W EQ *

Splice Weld OK

$$A_{g2 \times 2} = 1.36 \text{ in}^2$$

$$A_{g2.5 \times 2.5} = 2.25 \text{ in}^2$$



\* This is a yielding, ductile failure & actual yield stress is probably more like 1.1 to 1.3 x F<sub>y</sub>, we feel this is okay

# 11

## EDGE ANGLE SPLICE

11A AS NOTED NO SCALE

Check Tension:  $\phi P_n = 0.9(36 \text{ ksi})(1.36 \text{ in}^2) = 44.0 \text{ k} < 50.4 \text{ k}$   
 " "  $(2.25 \text{ in}^2) = 72.9 \text{ k} < 77.7 \text{ k}$

Splice Angle  
ok

$$\phi P_n = 0.75(58 \text{ ksi})(1.36 \text{ in}^2) = 59.2 \text{ k} > 50.4 \text{ k}$$

$$\text{" " } (2.25 \text{ in}^2) = 97.9 \text{ k} > 77.7 \text{ k}$$

ok

\*  $A_{L3 \times 3 \times 1/4} = 1.44 \text{ in}^2$   
 $A_{L3.5 \times 3.5 \times 3/8} = 2.5 \text{ in}^2$

\* By inspection, Edge Angles are okay \*

\* Compression is Taken Thru Conc. Tilt-Panel Walls & Panel to Panel Connections **B-19-1101**

Anchorage Force =  $6.31^k (Ult) \times 1.4 = 8.84^k$

Check Welds: Jst to Brg  $\phi R_n = 1.392(3)(2) 2.5" = 20.9^k > 8.84^k$

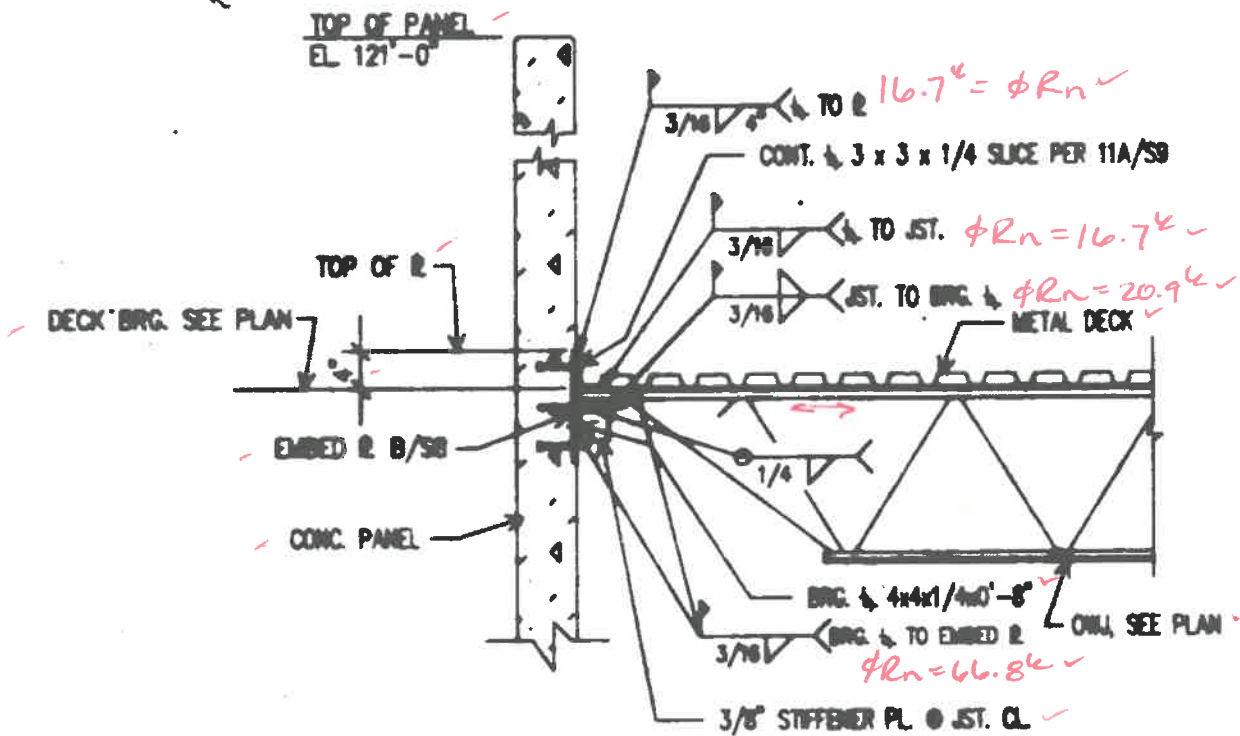
Brg & Stiff  $\phi R_n = 1.392(4)(6")(2) = 66.8^k$

$> 8.84^k + 4.4^k$   
 $1.0E \uparrow$

Welds are ok

Jst Ties Across Jst Girder =  $\phi R_n = 1.392(3)(2)(1.5") = 12.5^k > 8.8^k$

ok  $1.20 + 1.61$   
ok



# 1 JST. BRG. AT WALL

1/2" = 1'-0"

In-Plane Shear =  $99.6 p1 f (5.28')(2) = 10518^{\#}$

$$\text{Anchorage Force} = 6.31^k \leftarrow 1.0 E \leftarrow \times 2 = 12.62^k$$

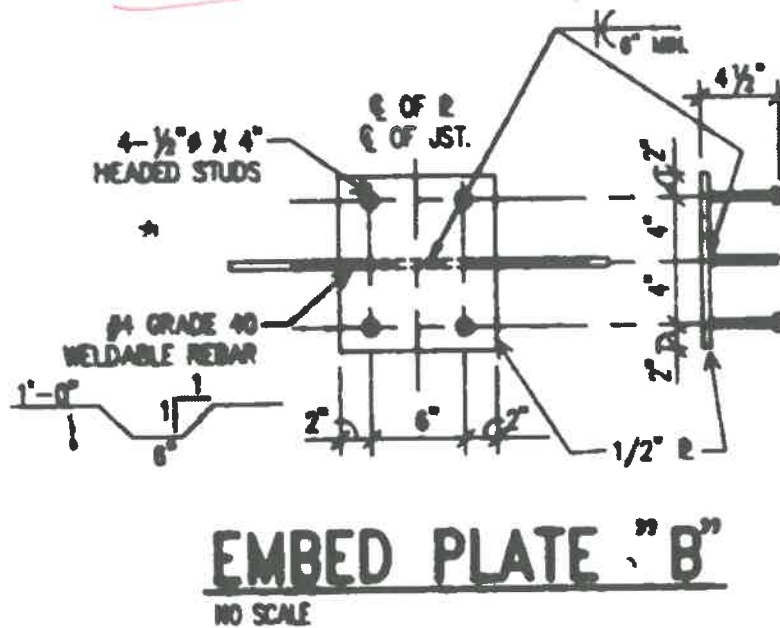
(ult)

$$D = 20 \text{ psf} (5.28') (26' / 2) = 1375^\# \leftrightarrow 1.20 = 1650^\#$$

$$S = 25 \text{ psf} (5.28') (26' / 2) = 1720^\# \leftrightarrow 1.05 = 1720^\#$$

See Hilti Design

Embed Plate is OK



\* By Inspection, Larger embed  $\Phi$ 's supporting joist Girder, steel beam, etc. are ok for anchorage of concrete walls out of plane.

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Company:		Page:	1
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

Specifier's comments:

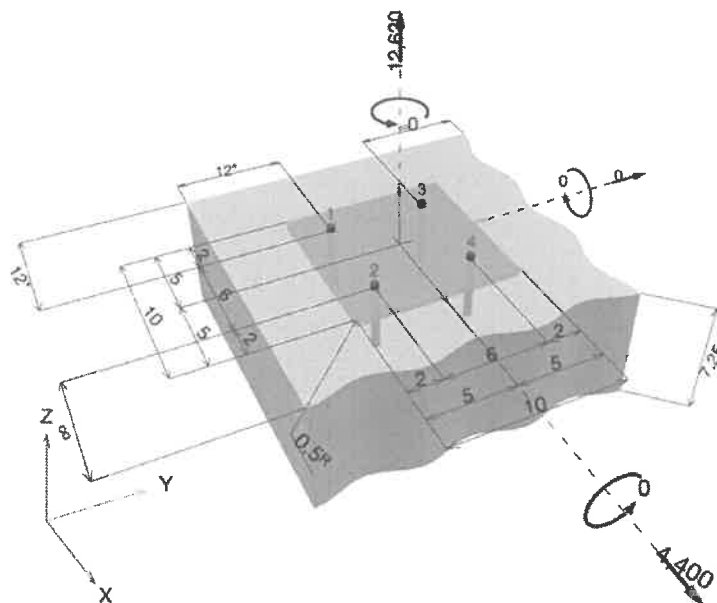
## 1 Input data



<b>Anchor type and diameter:</b>	<b>AWS D1.1 GR. B 1/2</b>
Item number:	not available
Effective embedment depth:	$h_{ef} = 4.000$ in.
Material:	
Evaluation Service Report:	Hilti Technical Data
Issued   Valid:	-   -
Proof:	Design Method ACI 318-14 / CIP
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 10.000$ in. x $10.000$ in. x $0.500$ in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, $4000$ , $f'_c = 4,000$ psi; $h = 7.250$ in.
Reinforcement:	tension: condition B, shear: condition B; edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

### Geometry [in.] & Loading [lb, in.lb]



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Company:	Page: 2
Address:	Specifier:
Phone   Fax:	E-Mail:
Design:	Date: 1/8/2021
Fastening point: (E) Jst Brg Embed "B"	

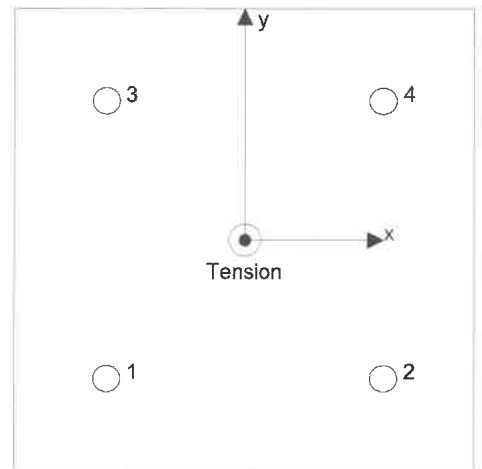
**1.1 Design results**

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 12,620; V <sub>x</sub> = 4,400; V <sub>y</sub> = 0; M <sub>x</sub> = 0; M <sub>y</sub> = 0; M <sub>z</sub> = 0;	yes	88

**2 Load case/Resulting anchor forces**
**Anchor reactions [lb]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	3,155	1,100	1,100	0
2	3,155	1,100	1,100	0
3	3,155	1,100	1,100	0
4	3,155	1,100	1,100	0



max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 12,620 [lb]  
 resulting compression force in (x/y)=(0.000/0.000): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

**3 Tension load**

	Load N <sub>ua</sub> [lb]	Capacity $\phi$ N <sub>n</sub> [lb]	Utilization $\beta_N = N_{ua} / \phi N_n$	Status
Steel Strength*	3,155	9,555	34	OK
Pullout Strength*	3,155	9,895	32	OK
Concrete Breakout Failure**	12,620	14,344	88	OK
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

\* highest loaded anchor \*\*anchor group (anchors in tension)



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Company:		Page:	3
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

**3.1 Steel Strength**

$$N_{sa} = A_{se,N} f_{uta} \quad \text{ACI 318-14 Eq. (17.4.1.2)}$$

$$\phi N_{sa} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

**Variables**

$A_{se,N}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]
0.20	65,000

**Calculations**

$N_{sa}$ [lb]
12,740

**Results**

$N_{sa}$ [lb]	$\phi_{steel}$	$\phi N_{sa}$ [lb]	$N_{ua}$ [lb]
12,740	0.750	9,555	3,155

**3.2 Pullout Strength**

$$N_{pN} = \psi_{c,p} N_p \quad \text{ACI 318-14 Eq. (17.4.3.1)}$$

$$N_p = 8 A_{brg} f'_c \quad \text{ACI 318-14 Eq. (17.4.3.4)}$$

$$\phi N_{pN} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

**Variables**

$\psi_{c,p}$	$A_{brg}$ [in. <sup>2</sup> ]	$\lambda_a$	$f'_c$ [psi]
1.000	0.59	1.000	4,000

**Calculations**

$N_p$ [lb]
18,848

**Results**

$N_{pn}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi N_{pn}$ [lb]	$N_{ua}$ [lb]
18,848	0.700	0.750	1.000	9,895	3,155

**Hilti PROFIS Engineering 3.0.66**

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Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

**3.3 Concrete Breakout Failure**

$$N_{cbg} = \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \quad \text{ACI 318-14 Eq. (17.4.2.1b)}$$

$$\phi N_{cbg} \geq N_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

$$A_{Nc} \text{ see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)}$$

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
4.000	0.000	0.000	12.000	1.000
$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psij]	
-	24	1.000	4,000	

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [lb]
324.00	144.00	1.000	1.000	1.000	1.000	12,143

**Results**

$N_{cbg}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi N_{cbg}$ [lb]	$N_{ua}$ [lb]
27,322	0.700	0.750	1.000	14,344	12,620

**Hilti PROFIS Engineering 3.0.66**

www.hilti.com

Company:	Page: 5
Address:	Specifier:
Phone   Fax:	E-Mail:
Design:   (E) Jst Brg Embed "B"	Date: 1/8/2021
Fastening point:	

**4 Shear load**

	Load $V_{ua}$ [lb]	Capacity $\phi V_n$ [lb]	Utilization $\beta_V = V_{ua} / \phi V_n$	Status
Steel Strength*	1,100	8,281	14	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	4,400	38,251	12	OK
Concrete edge failure in direction y-**	4,400	25,036	18	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

**4.1 Steel Strength**

$$V_{sa} = A_{se,V} f_{uta} \quad \text{ACI 318-14 Eq. (17.5.1.2a)}$$

$$\phi V_{steel} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

**Variables**

$A_{se,V}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]
0.20	65,000

**Calculations**

$V_{sa}$ [lb]
12,740

**Results**

$V_{sa}$ [lb]	$\phi_{steel}$	$\phi V_{sa,eq}$ [lb]	$V_{ua}$ [lb]
12,740	0.650	8,281	1,100

**Hilti PROFIS Engineering 3.0.66**

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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp,g} = k_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1b)}$$

$$\phi V_{cp,g} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	4.000	0.000	0.000	12.000
$\psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
1.000	-	24	1.000	4,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [lb]
324.00	144.00	1.000	1.000	1.000	1.000	12,143

**Results**

$V_{cp,g}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp,g}$ [lb]	$V_{ua}$ [lb]
54,644	0.700	1.000	1.000	38,251	4,400

**Hilti PROFIS Engineering 3.0.66**

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Company:		Page:	7
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

**4.3 Concrete edge failure in direction y-**

$$V_{cbg} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1b)}$$

$$\phi V_{cbg} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ec,V} = \left( \frac{1}{1 + \frac{2e_v}{3c_{a1}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.5)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 8 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.3)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$e_{cV}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]
18.000	12.000	0.000	1.000	7.250
$l_e$ [in.]	$\lambda_a$	$d_a$ [in.]	$f_c$ [psi]	$\Psi_{parallel,V}$
4.000	1.000	0.500	4,000	2.000

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [lb]
326.25	1,458.00	1.000	1.000	1.930	41,413

**Results**

$V_{cbg}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cbg}$ [lb]	$V_{ua}$ [lb]
35,766	0.700	1.000	1.000	25,036	4,400

**5 Combined tension and shear loads**

$\beta_N$	$\beta_V$	$\zeta$	Utilization $\beta_{NV}$ [%]	Status
0.880	0.176	5/3	87	OK

$$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} \leq 1$$

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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

## 6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_0$ .

**Fastening meets the design criteria!**

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Company:

Page:

9

Address:

Specifier:

Phone | Fax:

E-Mail:

Design:

(E) Jst Brg Embed "B"

Date:

1/8/2021

Fastening point:

## 7 Installation data

Profile: no profile

Anchor type and diameter: AWS D1.1 GR. B 1/2

 Hole diameter in the fixture:  $d_f = 0.562$  in.

Item number: not available

Plate thickness (input): 0.500 in.

Installation torque: -

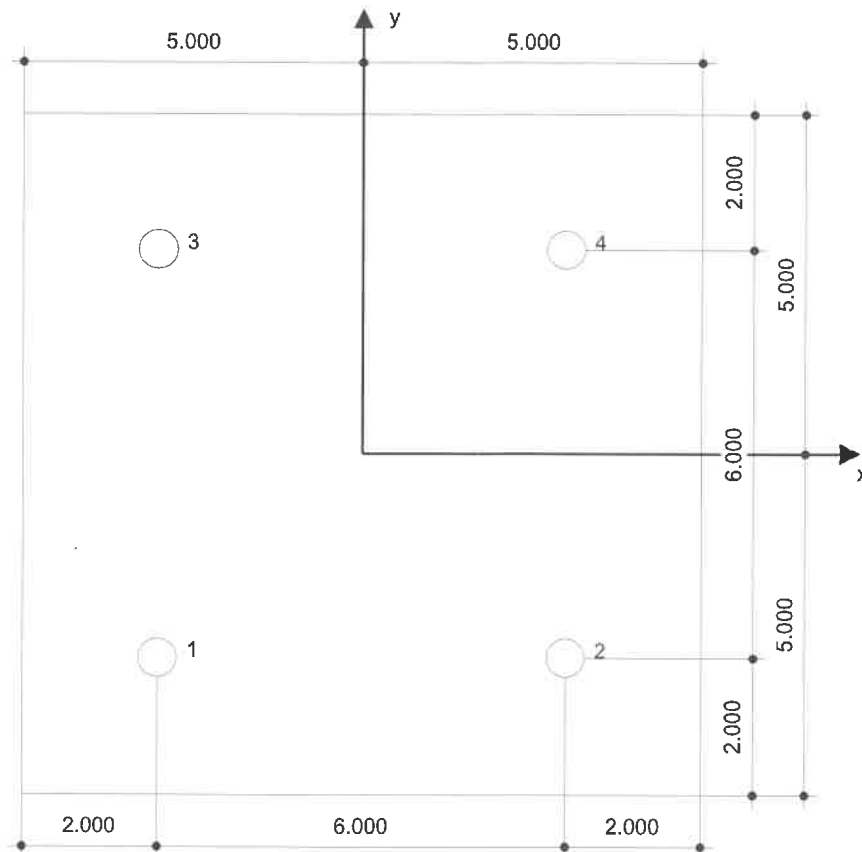
Recommended plate thickness: not calculated

Hole diameter in the base material: - in.

Hole depth in the base material: 4.000 in.

Minimum thickness of the base material: 4.813 in.

Hilti AWS welded headed stud anchor with 4 in embedment, 1/2, Steel galvanized, installation per instruction for use



Coordinates Anchor [in.]

Anchor	x	y	c <sub>-x</sub>	c <sub>+x</sub>	c <sub>-y</sub>	c <sub>+y</sub>
1	-3.000	-3.000	12.000	-	12.000	-
2	3.000	-3.000	18.000	-	12.000	-
3	-3.000	3.000	-	-	18.000	-
4	3.000	3.000	-	-	18.000	-

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Company:		Page:	10
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B"	Date:	1/8/2021
Fastening point:			

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## 8 Remarks; Your Cooperation Duties

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- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.



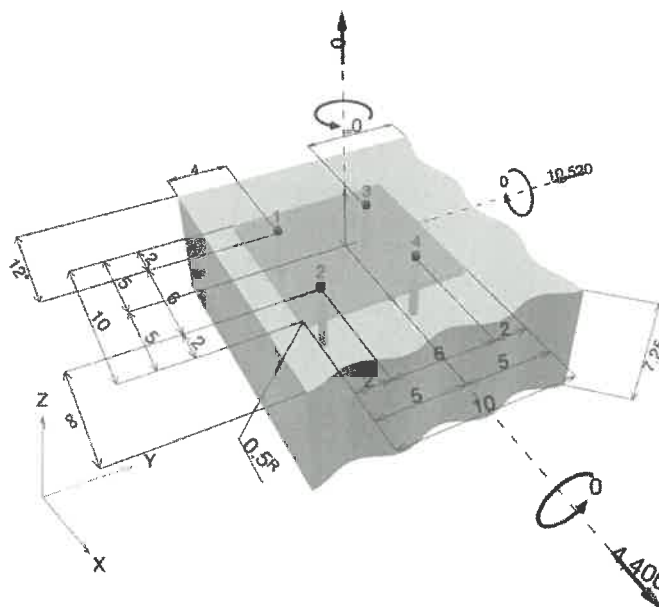
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Company:		Page:	1
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B" (1)	Date:	1/8/2021
Fastening point:	<i>In-plane Shear</i>		

**Specifier's comments:**
**1 Input data**

<b>Anchor type and diameter:</b>	<b>AWS D1.1 GR. B 1/2</b>
Item number:	not available
Effective embedment depth:	$h_{ef} = 4.000$ in.
Material:	
Evaluation Service Report:	Hilti Technical Data
Issued   Valid:	-   -
Proof:	Design Method ACI 318-14 / CIP
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 10.000$ in. x $10.000$ in. x $0.500$ in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, $5000$ , $f'_c = 5,000$ psi; $h = 7.250$ in.
Reinforcement:	tension: condition B, shear: condition B; edge reinforcement: > No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.2.3.4.3 (d)) Shear load: yes (17.2.3.5.3 (c))

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

**Geometry [in.] & Loading [lb, in.lb]**


Input data and results must be checked for conformity with the existing conditions and for plausibility!  
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Company:	Page: 2
Address:	Specifier:
Phone   Fax:	E-Mail:
Design: (E) Jst Brg Embed "B" (1)	Date: 1/8/2021
Fastening point:	

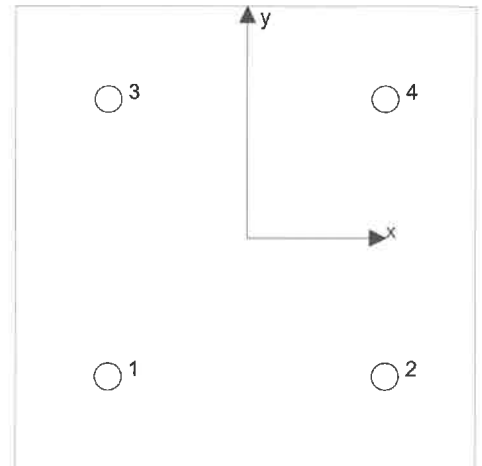
**1.1 Design results**

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	$N = 0; V_x = 4,400; V_y = -10,520;$ $M_x = 0; M_y = 0; M_z = 0;$	yes	99

**2 Load case/Resulting anchor forces**
**Anchor reactions [lb]**

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0	2,851	1,100	-2,630
2	0	2,851	1,100	-2,630
3	0	2,851	1,100	-2,630
4	0	2,851	1,100	-2,630



max. concrete compressive strain: - [%]  
 max. concrete compressive stress: - [psi]  
 resulting tension force in (x/y)=(0.000/0.000): 0 [lb]  
 resulting compression force in (x/y)=(0.000/0.000): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

**3 Tension load**

	Load $N_{ua}$ [lb]	Capacity $\phi N_n$ [lb]	Utilization $\beta_N = N_{ua}/\phi N_n$	Status
Steel Strength*	N/A	N/A	N/A	N/A
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	N/A	N/A	N/A	N/A
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

\* highest loaded anchor \*\*anchor group (anchors in tension)

**Hilti PROFIS Engineering 3.0.66**

www.hilti.com

Company:		Page:	3
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B" (1)	Date:	1/8/2021
Fastening point:			

**4 Shear load**

	Load $V_{ua}$ [lb]	Capacity $\phi V_n$ [lb]	Utilization $\beta_v = V_{ua} / \phi V_n$	Status
Steel Strength*	2,851	8,281	35	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	11,403	34,213	34	OK
Concrete edge failure in direction y-**	11,403	11,577	99	OK

\* highest loaded anchor    \*\*anchor group (relevant anchors)

**4.1 Steel Strength**

$$V_{sa} = A_{se,V} f_{uta} \quad \text{ACI 318-14 Eq. (17.5.1.2a)}$$

$$\phi V_{steel} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

**Variables**

$A_{se,V}$ [in. <sup>2</sup> ]	$f_{uta}$ [psi]
0.20	65,000

**Calculations**

$V_{sa}$ [lb]
12,740

**Results**

$V_{sa}$ [lb]	$\phi_{steel}$	$\phi V_{sa,eq}$ [lb]	$V_{ua}$ [lb]
12,740	0.650	8,281	2,851

**Hilti PROFIS Engineering 3.0.66**

www.hilti.com

Company:		Page:	4
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B" (1)	Date:	1/8/2021
Fastening point:			

**4.2 Pryout Strength**

$$V_{cp,g} = K_{cp} \left[ \left( \frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right] \quad \text{ACI 318-14 Eq. (17.5.3.1b)}$$

$$\phi V_{cp,g} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Nc}$  see ACI 318-14, Section 17.4.2.1, Fig. R 17.4.2.1(b)

$$A_{Nc0} = 9 h_{ef}^2 \quad \text{ACI 318-14 Eq. (17.4.2.1c)}$$

$$\psi_{ec,N} = \left( \frac{1}{1 + \frac{2 e_N}{3 h_{ef}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.4)}$$

$$\psi_{ed,N} = 0.7 + 0.3 \left( \frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.5b)}$$

$$\psi_{cp,N} = \text{MAX} \left( \frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.4.2.7b)}$$

$$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5} \quad \text{ACI 318-14 Eq. (17.4.2.2a)}$$

**Variables**

$k_{cp}$	$h_{ef}$ [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	4.000	0.000	0.000	4.000
$\psi_{c,N}$	$c_{ac}$ [in.]	$k_c$	$\lambda_a$	$f'_c$ [psi]
1.000	-	24	1.000	5,000

**Calculations**

$A_{Nc}$ [in. <sup>2</sup> ]	$A_{Nc0}$ [in. <sup>2</sup> ]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	$N_b$ [lb]
288.00	144.00	1.000	1.000	0.900	1.000	13,576

**Results**

$V_{cp,g}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cp,g}$ [lb]	$V_{ua}$ [lb]
48,875	0.700	1.000	1.000	34,213	11,403

www.hilti.com

Company:		Page:	5
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B" (1)	Date:	1/8/2021
Fastening point:			

**4.3 Concrete edge failure in direction y-**

$$V_{cbg} = \left( \frac{A_{Vc}}{A_{Vc0}} \right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b \quad \text{ACI 318-14 Eq. (17.5.2.1b)}$$

$$\phi V_{cbg} \geq V_{ua} \quad \text{ACI 318-14 Table 17.3.1.1}$$

 $A_{Vc}$  see ACI 318-14, Section 17.5.2.1, Fig. R 17.5.2.1(b)

$$A_{Vc0} = 4.5 c_{a1}^2 \quad \text{ACI 318-14 Eq. (17.5.2.1c)}$$

$$\Psi_{ec,V} = \left( \frac{1}{1 + \frac{2e_v}{3c_{a1}}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.5)}$$

$$\Psi_{ed,V} = 0.7 + 0.3 \left( \frac{c_{a2}}{1.5c_{a1}} \right) \leq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.6b)}$$

$$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0 \quad \text{ACI 318-14 Eq. (17.5.2.8)}$$

$$V_b = \left( 8 \left( \frac{l_e}{d_a} \right)^{0.2} \sqrt{d_a} \right) \lambda_a \sqrt{f'_c} c_{a1}^{1.5} \quad \text{ACI 318-14 Eq. (17.5.2.3)}$$

**Variables**

$c_{a1}$ [in.]	$c_{a2}$ [in.]	$e_{cV}$ [in.]	$\Psi_{c,V}$	$h_a$ [in.]
10.000	12.000	0.000	1.200	7.250
$l_e$ [in.]	$\lambda_a$	$d_a$ [in.]	$f'_c$ [psi]	$\Psi_{parallel,V}$
4.000	1.000	0.500	5,000	1.000

**Calculations**

$A_{Vc}$ [in. <sup>2</sup> ]	$A_{Vc0}$ [in. <sup>2</sup> ]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	$V_b$ [lb]
239.25	450.00	1.000	0.940	1.438	19,172

**Results**

$V_{cbg}$ [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi V_{cbg}$ [lb]	$V_{ua}$ [lb]
16,539	0.700	1.000	1.000	11,577	11,403

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Company:		Page:	6
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B" (1)	Date:	1/8/2021
Fastening point:			

## 5 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2018, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to <https://submittals.us.hilti.com/PROFISAnchorDesignGuide/>
- An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-14, Chapter 17, Section 17.2.3.4.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.2.3.4.3 (b), Section 17.2.3.4.3 (c), or Section 17.2.3.4.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.2.3.5.3 (a), Section 17.2.3.5.3 (b), or Section 17.2.3.5.3 (c).
- Section 17.2.3.4.3 (b) / Section 17.2.3.5.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.2.3.4.3 (c) / Section 17.2.3.5.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.2.3.4.3 (d) / Section 17.2.3.5.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by  $\omega_0$ .

## Fastening meets the design criteria!

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Company:  
 Address:  
 Phone | Fax: |  
 Design: (E) Jst Brg Embed "B" (1)  
 Fastening point:

Page: 7  
 Specifier:  
 E-Mail:  
 Date: 1/8/2021

## 6 Installation data

Profile: no profile

Hole diameter in the fixture:  $d_f = 0.562$  in.

Plate thickness (input): 0.500 in.

Recommended plate thickness: not calculated

Anchor type and diameter: AWS D1.1 GR. B 1/2

Item number: not available

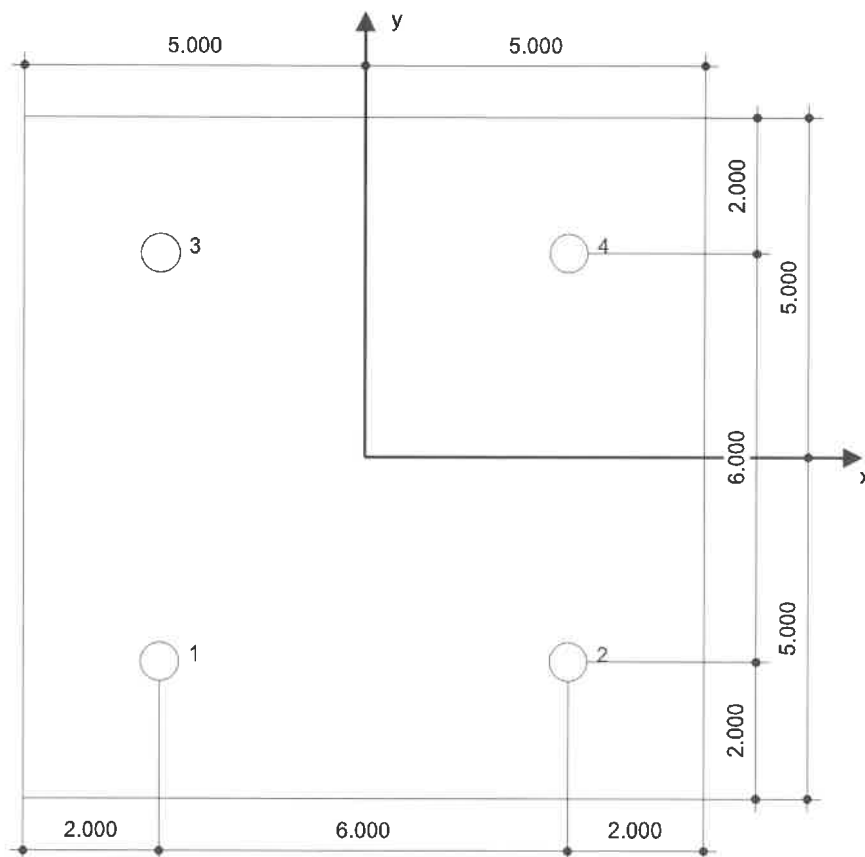
Installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 4.000 in.

Minimum thickness of the base material: 4.813 in.

Hilti AWS welded headed stud anchor with 4 in embedment, 1/2, Steel galvanized, installation per instruction for use



Coordinates Anchor [in.]

Anchor	x	y	$c_{-x}$	$c_{+x}$	$c_{-y}$	$c_{+y}$
1	-3.000	-3.000	12.000	-	4.000	-
2	3.000	-3.000	18.000	-	4.000	-
3	-3.000	3.000	12.000	-	10.000	-
4	3.000	3.000	18.000	-	10.000	-

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Company:		Page:	8
Address:		Specifier:	
Phone   Fax:		E-Mail:	
Design:	(E) Jst Brg Embed "B" (1)	Date:	1/8/2021
Fastening point:			

## 7 Remarks; Your Cooperation Duties

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- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.



## **MECHANICAL UNIT DESIGN**

# BSE

Brienen Structural Engineers, P.S.

RTU-1 Added Beam: design length = 26' long

Roof Dead Load = 15 psf x 3' trib width = 45 plf

Roof Live Load = Snow Load = 25 psf x 3' trib width = 75 plf

Beam self-weight assume = 35 plf

w<sub>max</sub> = 155 plf

M<sub>max,dist</sub> = 155 plf x 26'<sup>2</sup> / 8 = 13098 lbs-ft

R<sub>max,dist</sub> = 155 plf x 26' / 2 = 2015 lbs

RTU-1 operating weight = 7331 lbs supported by a framing member at each side, assume each member supports 2/3 of the total weight to account for uneven loads. Also, assume the RTU can be located anywhere along the beam.

RTU weight per beam = 2/3 x 7331 lbs = 4887 lbs

M<sub>max,rtu @ mid-point</sub> = 4887 lbs x 26' / 4 = 31766 lbs-ft

R<sub>max,rtu @ ends</sub> = 4887 lbs

M<sub>max</sub> = 13908 + 31766 = 45674 lbs-ft

R<sub>max</sub> = 2015 + 4887 = 6902 lbs

Try W14x30. M<sub>a</sub> = 77000 lbs-ft @ 14' unbraced length (AISC Table 3-10)

I<sub>x</sub> = 291 in<sup>4</sup>

defl<sub>,dist</sub> = 5 (155 plf / 12000) (312")<sup>4</sup> / (384 x 29000 ksi x 291 in<sup>4</sup>) = 0.189"

defl<sub>,rtu</sub> = 4887 lbs (312")<sup>3</sup> / (48 x 29000000 psi x 291 in<sup>4</sup>) = 0.366"

defl<sub>,total</sub> = 0.556" = L/561

According to SJI K-Series ASD Standard Load Table, 18K3 at 26' span has an allowable load limit of 272 plf and a deflection-limited load of 190 plf @ L/360. By inspection, the specified steel beam is sufficiently stiff that under the new RTU loads, it will not deflect beyond the existing joists' limit and cause the joists to overstress and therefore is compatible with the existing joists' deflection.

Bracing force: assume 10% of total vertical load applied horizontally at the top flange (compression flange.) Total load = 155 plf x 26' + 4887 lbs = 8917 lbs.

Brace force = 10% x 8917 lbs = 892 lbs

Unbraced length = 8' max

Use L2-1/2x2-1/2x3/16, P<sub>a</sub> = 2.69 kips > brace force / sin 45° = 1.3 kips -> OK (AISC Table 4-12)

Joist Girder Check: Existing = 28G5N6.8k

Actual load per panel point = (15 psf DL + 25 psf LL) x 26' x 5.25' = 5460 lbs

Assume 5600 lbs to include self-weight of joist girder and joists.

Therefore, available capacity per panel point = 1200 lbs.

Number of panel point per girder span = 4 -> each support has 2400 lbs available shear capacity.

Unit 1: Actual RTU-1 is located mid-span of beam -> assume beam reaction due to RTU = 2450 lbs, which is 2% in addition to the allowable shear load. Ok by inspection.

Unit 2, 3: Original structural drawings included an additional 1.7k load per panel point; therefore, the allowable shear load = 2400 lbs + 1700 lbs x 2 = 5800 lbs > beam reaction due to RTU = 4887 lbs max

Unit 4: 1/2 RTU-4 weight = 2859 lbs / 2 = 1430 lbs < allowable shear capacity = 2400 lbs.