



# Letter of Transmittal

POB 1145, 550 Cheshire Rd, Pittsfield  
MA 01202

**Date:** February 12, 2018

**Company:** TURNER CONSTRUCTION  
2 Seaport Lane 2nd Floor  
Boston, MA 02210

**Job Name:** Maine Medical Center Vertical  
Expansion PG

**Location:** Portland, ME

**Job #:** 51267

**Phone:**

**RE:** Submittal 2 Lateral Analysis,  
Design Criteria and Foundation  
Loads

**Attention:** Richard Martineau

We are sending you the following items:

- Mix Design
- Shop Drawings
- Framing Drawings
- Copy of Letter
- Specifications
- Sections
- Calculations
- Other


Copies	Drawing Number	Description
1	LA1.00 - LA1-121	Lateral Analysis
1	DC1 - DC14	Design Criteria
1	FL1 - FL50	Foundation Loads

- These are sent for:
- Approval
  - Your Use
  - Record Set
  - Final Approval
  - Coordination
  - Distribution
  - Information Only

**Remarks:** For Approval

<b>TURNER CONSTRUCTION COMPANY</b>
Reviewed for General Acceptance only. This review does not relieve the Subcontractor of the responsibility for making the work conform to the requirements of the contract. The Subcontractor is responsible for all dimensions, correct fabrication and accurate fit with the work of other trades.
<b>SUBJECT TO ARCHITECTS APPROVAL</b>
Signed <u>rmartineau</u> Date <u>Feb 15, 2018</u>
Submittal No. <b>VG-034100-0001-0</b>

**Signed:**


---

**Todd Haley**

cc: File

DESIGN  
CALCULATIONS  
FOR  
MAINE MEDICAL VISITOR PS  
PORTLAND, ME

UNISTRESS PROJECT #51267

PREPARED BY:



7660 IMPERIAL WAY, SUITE 130  
ALLENTOWN, PENNSYLVANIA 18195  
PH. 610-871-3935

PREPARED FOR:

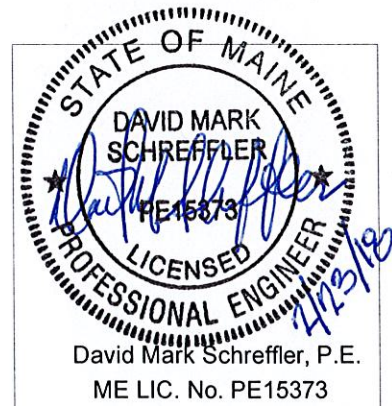
**unistress**

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PRECAST STRUCTURAL CONCRETE - MEMBER PRESTRESSED CONCRETE INSTITUTE

SUBMITTAL:

2 02/23/18 FOR APPROVAL - (SEE INDEX)



David Mark Schreffler, P.E.  
ME LIC. No. PE15373



**MAINE MEDICAL VISITOR PS**

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JOB	MAINE MEDICAL VISITOR PS		
SHEET NO.	LA1.00	OF	
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### **LATERAL ANALYSIS - EXECUTIVE SUMMARY**

Lateral Analysis for the structure was done using "ETABS" software designed by Computers and Structures Inc., CA. This program was used mainly to obtain values for the lateral forces resisted by Lateral force resisting elements, i.e., the structural walls. The program assigns these forces to the walls based on their relative stiffness and their location within the structure using mathematical models.

A (3-D) model was created graphically in the program and the structure was analyzed for the effects of wind and seismic forces in accordance with the International Building Code (IBC) 2015 and ASCE 7-10 - Minimum Design Loads for Buildings and Other Structures.

The Structure comprises of 7 levels of existing parking structure and 3 levels of proposed parking structure with 1 bay of Ramp and 1 bay of Flat Diaphragm @ all Levels.

Following are some of the assumptions made to model the structure in ETABS:

1. 14" thick Lite Walls along Grid 'B' and b/w Grids '2' & '6' in Global 'X' (East-West) direction and varying thicknesses of Shear Walls & Wall Panels along grid '1', '2', '4', '6' & '7' in Global 'Y' (North-South) direction are considered to be the part of Lateral Force Resisting System.
2. The primary floor members (12DT34) in the Existing Parking area is assigned with 6.77" thickness which gives its equivalent self wt. of 82.14 psf and the primary floor members (12DT30) in the Proposed Parking area is assigned with 6.47" thickness which gives its equivalent self weight of 80.00 psf. The Floor Diaphragms are modeled as Semi-Rigid within the ETABS model.
3. Ramps are modeled "flat" at its upper level in ETABS conservatively.
4. The additional mass from the East and West Stairs have been applied to the Structure at each Level. (see sheets "LA1.02" thru "LA1.07")
5. In Global 'X' and 'Y' directions, the lateral force resisting system is considered as "Intermediate Precast Shearwalls" with an R value of 4 and 5 respectively. Openings in the LW's, SW's and WP's are modeled as well.

The program calculates and distributes all story shears to the lateral force resisting elements based on the Stiffnesses etc.

A comparison was done between seismic and wind forces and seismic forces govern the analysis (see "LA1.101").



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A) Check Which Load case Governs:

E-W direction: Ult.  $V_b$  (Wind) = 102.3 K (Sum of Wind Story Forces) (See "LA1.22")

N-S direction: Ult.  $V_b$  (Wind) = 230.4 K (Sum of Wind Story Forces) (See "LA1.24")  
=

$V_{b, seismic}$  = 822.3 K > 102.3 K (See "LA1.28")

657.9 K > 230.4 K (See "LA1.37")

**HENCE SEISMIC FORCES GOVERN ANALYSIS**



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**"Extradead" Load calculation at 'WEST STAIR TOWER' - used in ETABS model**

**At Level 3**

Load from 8" thk. Slabs at Stair Roof

Thickness of the Slab = 8 in.  
 Area of the Slab = 211.99 sqft + 316.57 sqft + 238.38 sqft  
 = 766.94sqft  
 = 76.7 kips (8/12 x x 766.94sqft x 0.15 kcf)

Load from 12" thk. Wallpanels

Thickness of the panel = 12 in.  
 Height of the Panel = 33.50 ft  
 Width of the Panel = 180.73 ft  
 = 908.2 kips (12/12 x (33.5 x 180.73) x 0.15 kcf)

Load from 8" thk. Slab at Stair Machine Slabs

Thickness of the Slab = 8 in.  
 Area of the Slab = 211.99 sqft + 316.57 sqft + 135.21 sqft  
 = 663.77sqft  
 Total DL = 66.4 kips (8/12 x x 663.77sqft x 0.15 kcf)

Total DL = 1051.3 kips

Area from ETABS = 2062.50 sft (62.5' x 33')  
 (B/W grids 'B & C' and '1 & 2')  
 = 0.510 ksf (1051.3 / 2062.5)

**At Other Levels**

Load from 16" thk. Stair @ All Levels

Thickness of the Stair = 16 in. (Conservatively)  
 Length of the Stair = 17.17 ft  
 Width of the Stair = 7.88 ft  
 Total DL = 27.0 kips (16/12 x (17.17 x 7.875) x 0.15 kcf)

Load from 8" thk. Lobby Slabs

Thickness of the Slab = 8 in.  
 Area of the Slab = 316.57sqft  
 Total DL = 31.7 kips (8/12 x x 316.57sqft x 0.15 kcf)

Load from 12" thk. Wallpanels

Thickness of the panel = 12 in.  
 Height of the Panel = 10.00 ft  
 Width of the Panel = 180.73 ft  
 = 271.1 kips (12/12 x (10 x 180.73) x 0.15 kcf)

Total DL = 329.8 kips



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Area from ETABS = 2062.50 sft (62.5' x 33')  
(B/W grids 'B & C' and '1 & 2')  
= 0.160 ksf (329.8 / 2062.5)





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**"Extr: Load calculation at 'East Stair Tower' - used in ETABS model**

**At Level 3**

Load from Metal Fire stair

Self wt. of Stair = 50.0 psf (Assumed)  
 Length of the Stair = 6.92 ft (13.83'/2)  
 Width of the Stair = 10.75 ft  
 Total DL = 3.7 kips (50/1000 x 6.92 x 10.75)

Load from 6" thick Precast Slab

Thickness of the Slab = 6 inch (Assumed)  
 Length of the Slab = 6.33 ft  
 Width of the Slab = 10.75 ft  
 Total DL = 5.1 kips (6/12 x 6.33 x 10.75 x 0.15kcf)

Load from HSS 8 x 8 x 1/2

Unit weight of section = 0.048 klf  
 Length of the section = 61.84 ft (20.17' x 2 No's + 10.75' x 2 No's)  
 Total DL = 3.0 kips (0.048 x 61.84)

Load from HSS 10 x 10 x 1/2

Unit weight of section = 0.062 klf  
 Height of the section = 30.00 ft (5' x 6 No's)  
 Total DL = 1.9 kips (0.062 x 30)

Load from HSS 6 x 6 x 5/16

Unit weight of section = 0.023 klf  
 Length of the section = 31.70 ft (17.1' / 2 x 2 No's + 14.6' / 2 x 2 No's)  
 Total DL = 0.7 kips (0.023 x 31.7)

Load from Curtain Wall

Self wt. of Curtain Wall = 20.0 psf (Assumed)  
 Height of Curtain Wall = 5.00 ft  
 Width of Curtain Wall = 51.09 ft (20.17' x 2 No's + 10.75')  
 Dead load of Curtain Wall = (20/1000 x 5 x 51.09)  
 Total DL = 5.1 kips

Total DL = 19.5 kips

Area from ETABS

(B/W grids 'A & B' and '6 & 7') = 1930.50 sft  
 = 0.010 ksf (19.5 / 1930.5)



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**"Extr: Load calculation at 'East Stair Tower' - used in ETABS model**

**At Other Levels**

Load from Metal Fire stair

Self wt. of Stair = 50.0 psf (Assumed)  
 Length of the Stair = 13.83 ft  
 Width of the Stair = 10.75 ft  
 Total DL = 7.4 kips (50/1000 x 13.83 x 10.75)

Load from 6" thick Precast Slab

Thickness of the Slab = 6 inch (Assumed)  
 Length of the Slab = 6.33 ft  
 Width of the Slab = 10.75 ft  
 Total DL = 5.1 kips (6/12 x 6.33 x 10.75 x 0.15kcf)

Load from HSS 8 x 8 x 1/2

Unit weight of section = 0.048 klf  
 Length of the section = 61.84 ft (20.17' x 2 No's + 10.75' x 2 No's)  
 Total DL = 3.0 kips (0.048 x 61.84)

Load from HSS 10 x 10 x 1/2

Unit weight of section = 0.062 klf  
 Height of the section = 60.00 ft (10' x 6 No's)  
 Total DL = 3.7 kips (0.062 x 60)

Load from HSS 6 x 6 x 5/16

Unit weight of section = 0.023 klf  
 Length of the section = 63.40 ft (17.1' x 2 No's + 14.6' x 2 No's)  
 Total DL = 1.5 kips (0.023 x 63.4)

Load from Curtain Wall

Self wt. of Curtain Wall = 20.0 psf (Assumed)  
 Height of Curtain Wall = 10.00 ft  
 Width of Curtain Wall = 51.09 ft (20.17' x 2 No's + 10.75')  
 Dead load of Curtain Wall = (20/1000 x 10 x 51.09)  
 Total DL = 10.2 kips

Total DL = 30.9 kips

Area from ETABS = 1930.50 sft

(B/W grids 'A & B' and '6 & 7')  
 = 0.016 ksf (30.9 / 1930.5)



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### Load calculation for Metal Screen used in the ETABS model

Metal Screen load along grid 'A' and b/w grids '6' & '7' @ Sub Level-5 (Refer A45-01)

Unit wt. of Metal Screen = 10.0 psf (Assumed)

Height of the screen = 5.00 ft

Linear Load applied in Etabs = 0.05 klf (10/1000 x 5)

Apply 0.05 klf load along grid 'A' & b/w Grids '6 & 7', '4 & 5', '3 & 4' and '1 & 2' @ Sub level-5.

Metal Screen load along grid 'A' and b/w grids '6' & '7' @ Sub Level-4 thru Third Level.

(Refer A45-01)

Unit wt. of Metal Screen = 10.0 psf (Assumed)

Height of the screen = 10.00 ft

Linear Load applied in Etabs = 0.10 klf (10/1000 x 10)

Apply 0.1 klf load along grid 'A' & b/w Grids '6 & 7', '4 & 5', '3 & 4' and '1 & 2' @ Sub lvl-4 thru Third Lvl.

Metal Screen load along grid 'A' and b/w grids '5' & '6' @ Ground Level Thru Third Level.

(Refer A45-01)

Unit wt. of Metal Screen = 10.0 psf (Assumed)

Height of the screen = 10.00 ft

Linear Load applied in Etabs = 0.10 klf (10/1000 x 10)

Apply 0.1 klf load along grid 'A' & b/w Grids '5 & 6' @ Ground Level thru Third level.



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**Contribution of Snow Load as Seismic Mass used in the ETABS model**

Uniform Roof Design Snow Load = 50.4 psf (Refer DC-10)

**Note:** As per ASCE 7-10 Clause 12.7.2 where flat Roof Snow Load exceeds 30psf, 20 percent of the uniform design snow load regardless of actual roof slope.

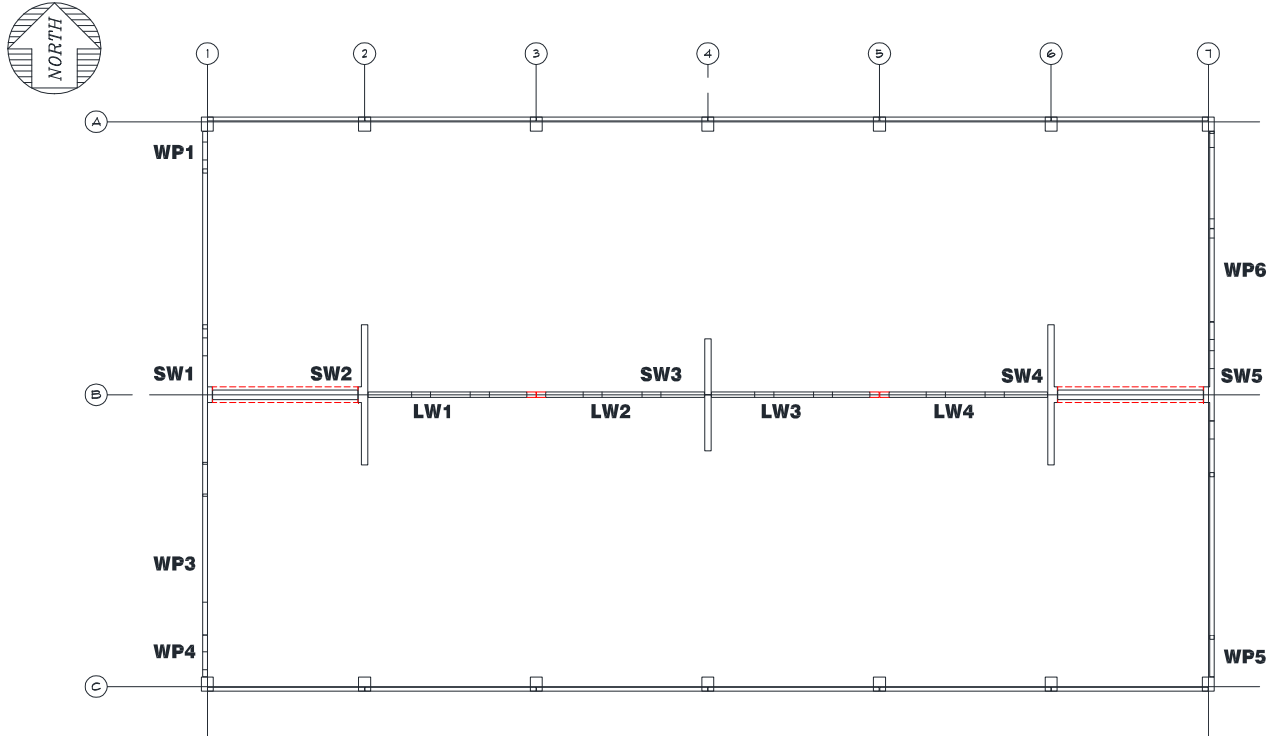
Total DL = 10.08 psf



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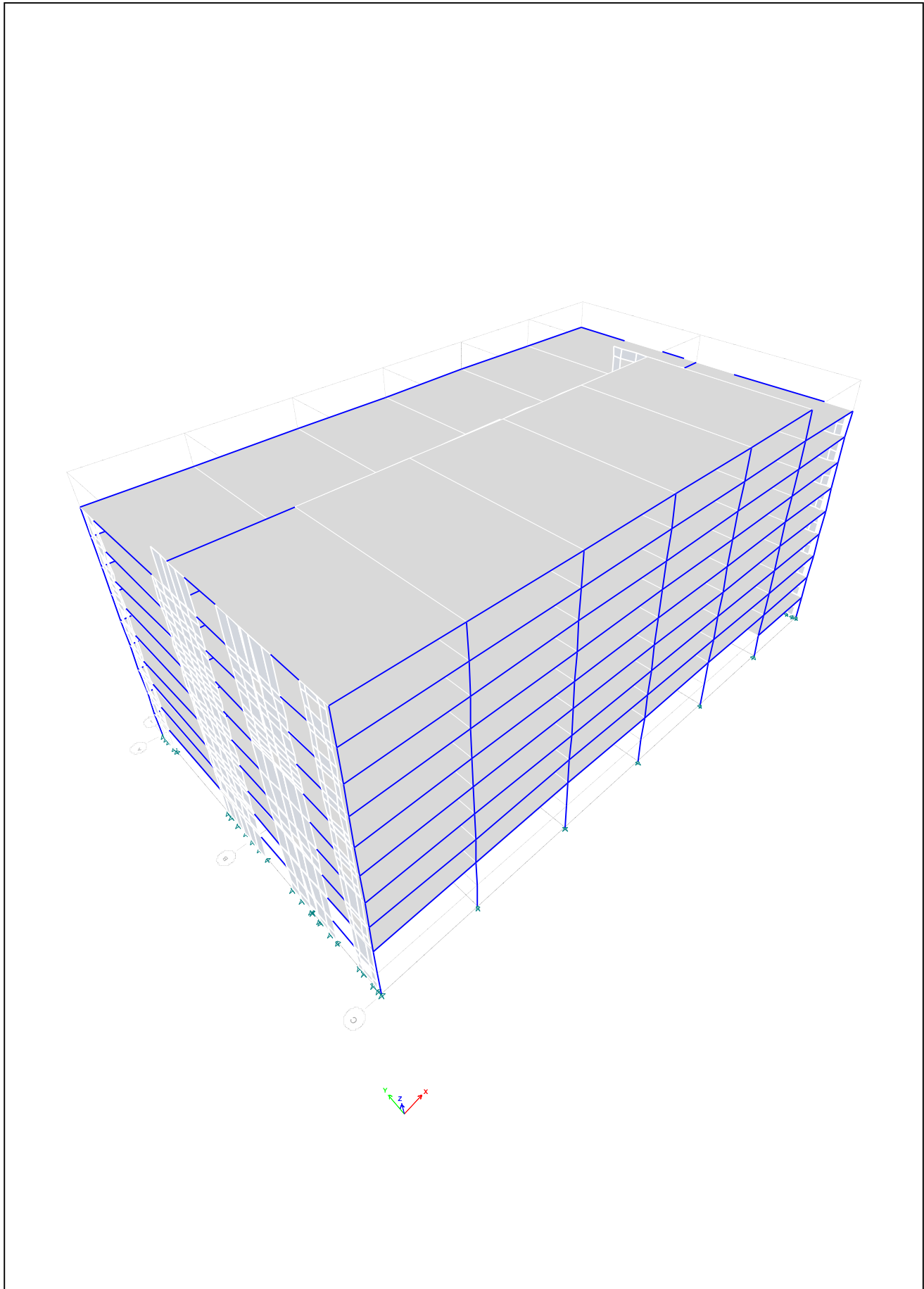
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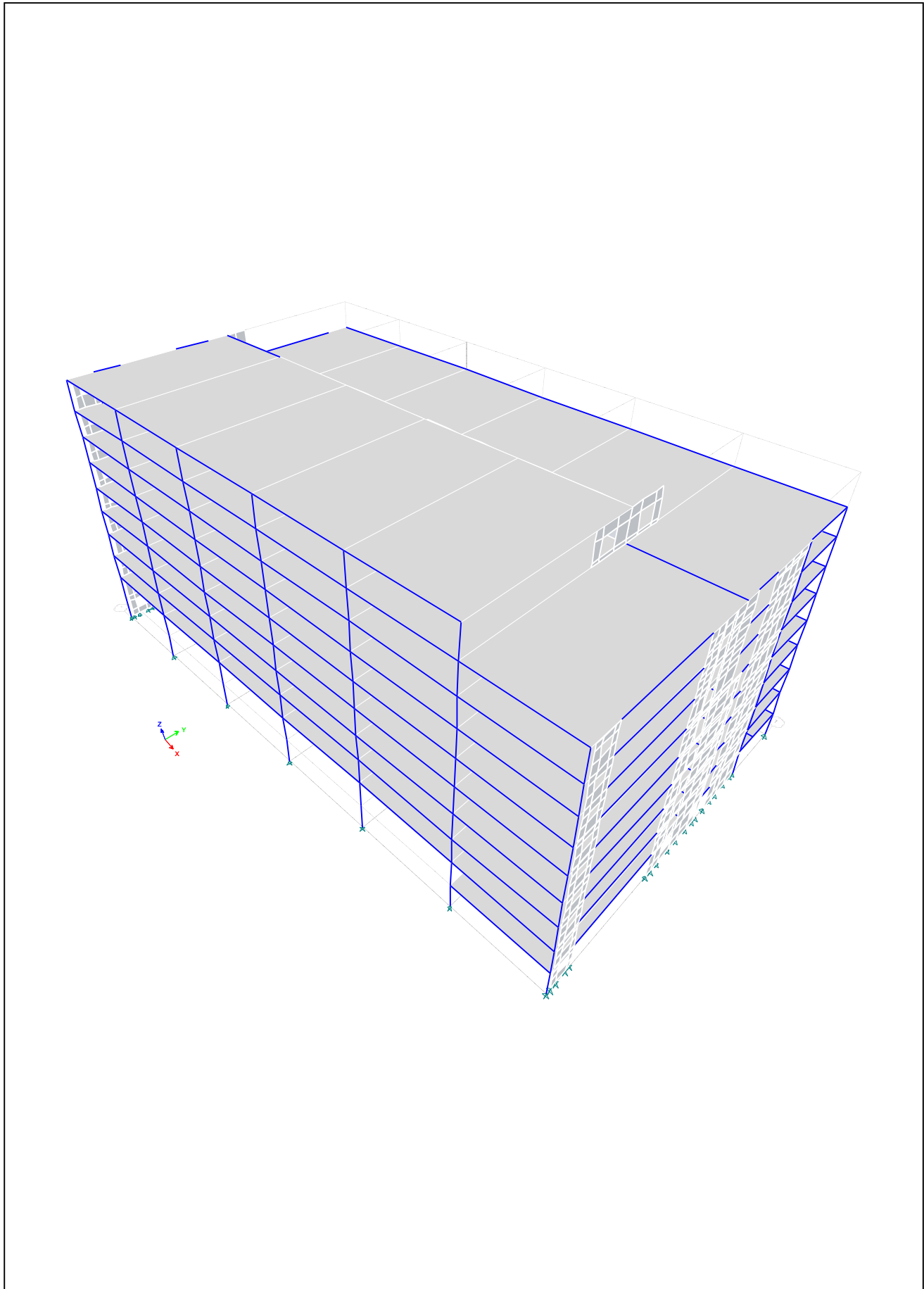
**PARACLETE PARKING STRUCTURE - LATERAL FORCE RESISTING SYSTEM**

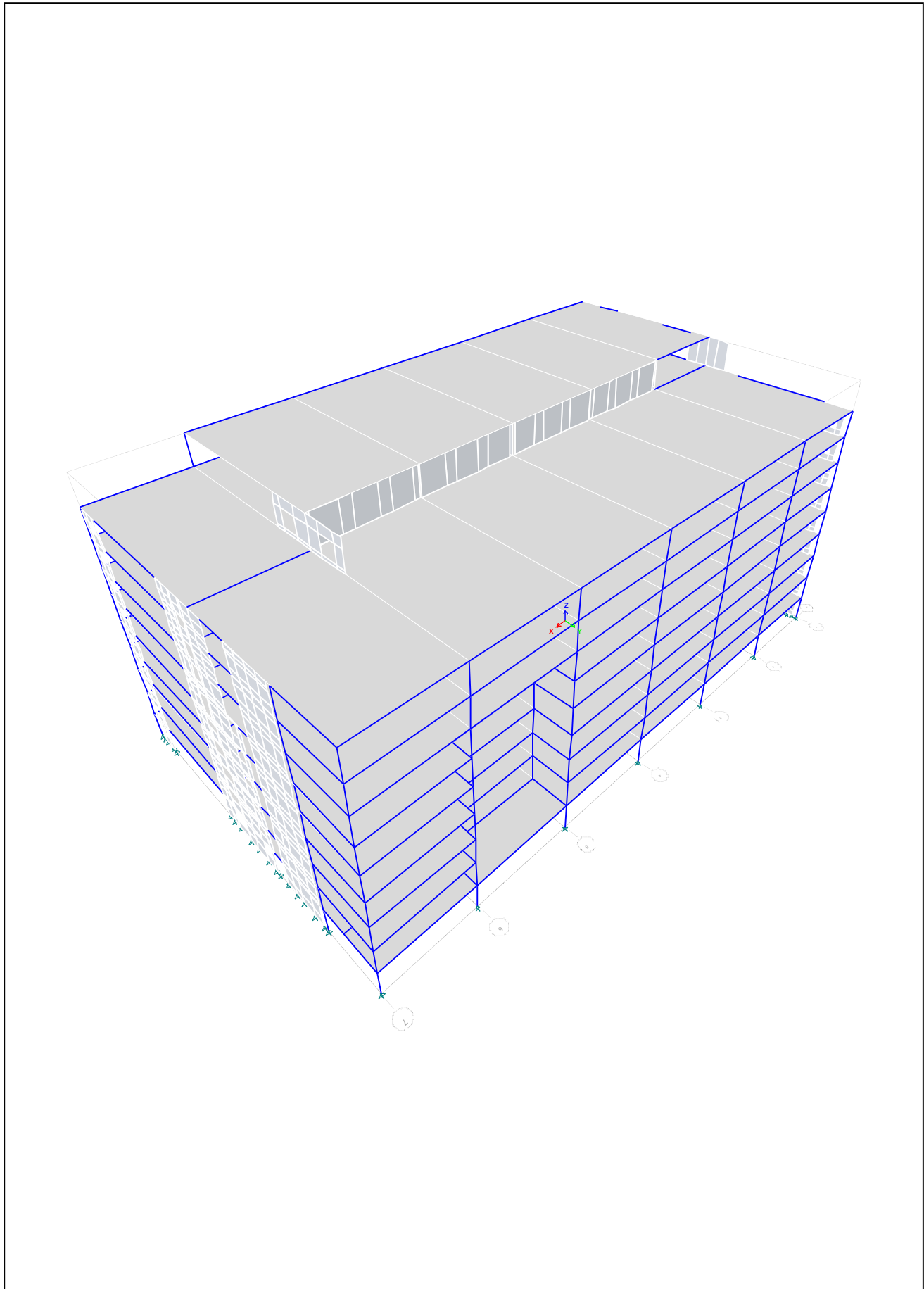


**NOTES:**

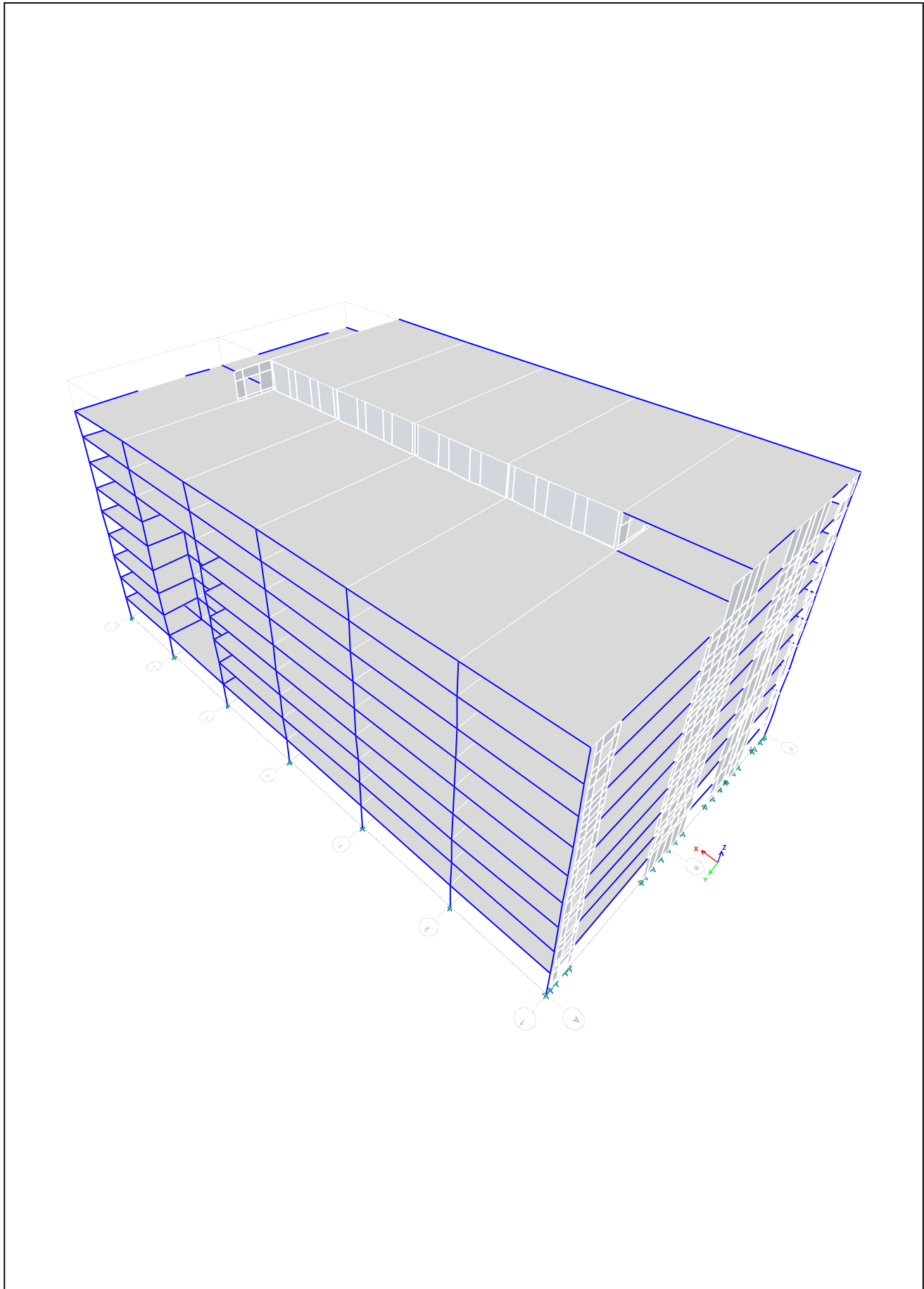
1. ALL LOADS ARE FROM PRECAST COMPONENTS ONLY.
2. "LW" INDICATES LITEWALLS.
3. "SW" INDICATES SHEARWALLS..







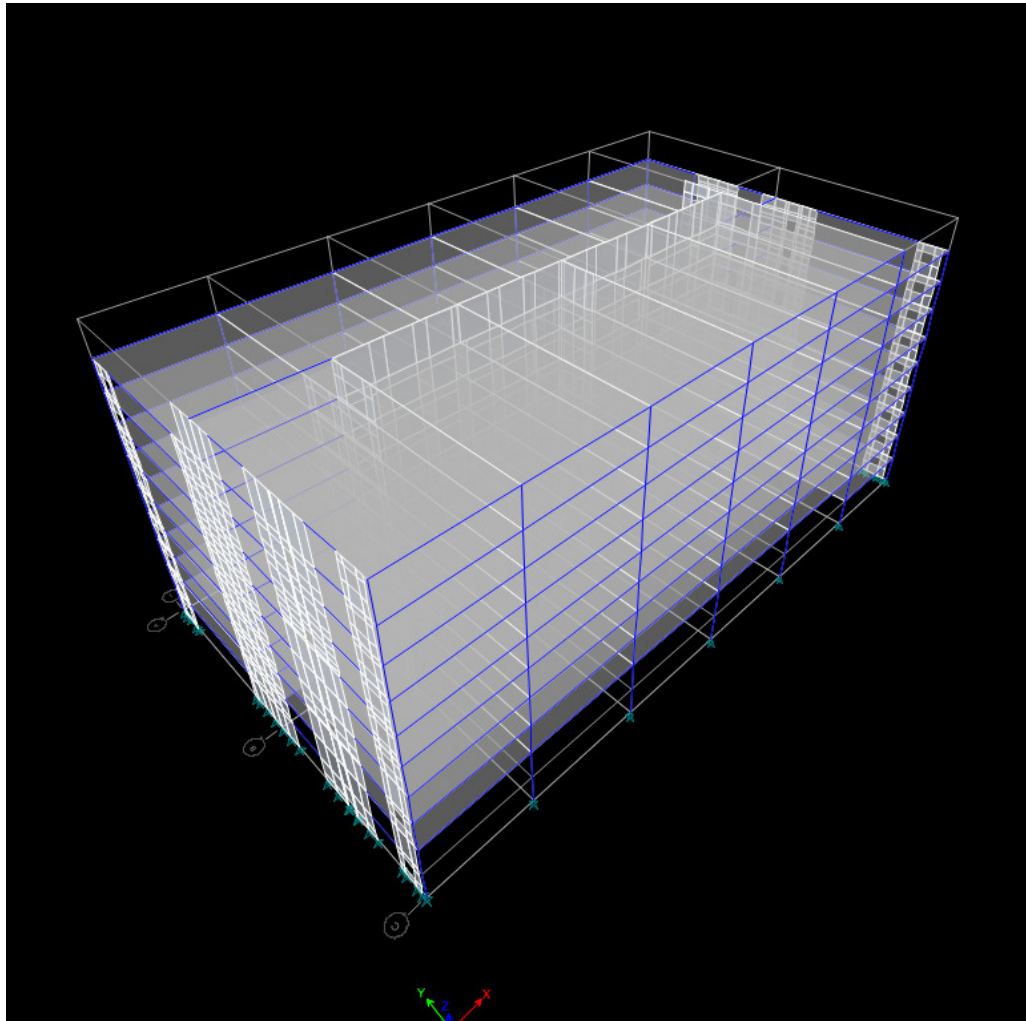




# ETABS<sup>®</sup> 2016

Integrated Building Design Software

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## MAINE MEDICAL VISITOR PS

Model File: Maine Medical Center PS, Revision 0  
2/12/2018

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## 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 Data

Name	Height in	Elevation in	Master Story	Similar To	Splice Story
THIRD LVL	130.2	2081.16	No	GROUND FLOOR	No
SECOND LVL	120	1950.96	No	GROUND FLOOR	No
FIRST LVL	120	1830.96	No	GROUND FLOOR	No
GROUND FLOOR	120	1710.96	Yes	None	No
BASEMENT	120	1590.96	No	SUB LVL-5	No
SUB LVL-1	120	1470.96	No	SUB LVL-5	No
SUB LVL-2	120	1350.96	No	SUB LVL-5	No
SUB LVL-3	120	1230.96	No	SUB LVL-5	No
SUB LVL-4	120	1110.96	No	SUB LVL-5	No
SUB LVL-5	120	990.96	Yes	None	No
Base	0	870.96	No	None	No

### 1.2 Grid Data

Table 1.2 - Grid Systems

Name	Type	Story Range	X Origin ft	Y Origin ft	Rotation deg	Bubble Size in	Color
G1	Cartesian	Default	0	0	0	60	ffa0a0a0

Table 1.3 - Grid Lines

Grid System	Grid Direction	Grid ID	Visible	Bubble Location	Ordinate ft
G1	X	1	Yes	End	0
G1	X	2	Yes	End	33
G1	X	3	Yes	End	69
G1	X	4	Yes	End	105
G1	X	5	Yes	End	141
G1	X	6	Yes	End	177
G1	X	7	Yes	End	210
G1	Y	C	Yes	Start	0
G1	Y	B	Yes	Start	62.5
G1	Y	A	Yes	Start	121

### 1.3 Mass

Table 1.4 - Mass Source

Name	Include Elements	Include Added Mass	Include Loads	Include Lateral	Include Vertical	Lump at Stories	IsDefault	Load Pattern	Multiplier
MsSrc1	Yes	Yes	Yes	Yes	No	Yes	Yes	Extra Dead	1

**Table 1.5 - 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	Cumulative X lb-s <sup>2</sup> /ft	Cumulative Y lb-s <sup>2</sup> /ft	XCCM ft	YCCM ft	XCR ft	YCR ft
SUB LVL-5	D1	0	0	122.0605	82.6844	0	0	0	0		
SUB LVL-4	D2	0	0	98.3926	58.0796	0	0	0	0		
SUB LVL-3	D3	0	0	98.4636	58.1033	0	0	0	0		
SUB LVL-2	D4	0	0	98.4554	58.0981	0	0	0	0		
SUB LVL-1	D5	0	0	98.4107	58.1084	0	0	0	0		
GROUND FLOOR	D6	0	0	98.35	59.2462	0	0	0	0		
BASEMENT	D6	0	0	98.021	58.6461	0	0	0	0		
FIRST LVL	D7	0	0	98.3101	59.4173	0	0	0	0		
SECOND LVL	D9	0	0	98.8789	60.7816	0	0	0	0		
THIRD LVL	D10	0	0	58.7416	31.5898	0	0	0	0		

**Table 1.6 - Mass Summary by Diaphragm**

Story	Diaphragm	Mass X lb-s <sup>2</sup> /ft	Mass Y lb-s <sup>2</sup> /ft	Mass Moment of Inertia kip-ft-s <sup>2</sup>	X Mass Center ft	Y Mass Center ft
THIRD LVL	D10	0	0	0	58.7416	31.5898
SECOND LVL	D9	0	0	0	98.8789	60.7816
FIRST LVL	D7	0	0	0	98.3101	59.4173
GROUND FLOOR	D6	0	0	0	98.35	59.2462
BASEMENT	D6	0	0	0	98.021	58.6461
SUB LVL-1	D5	0	0	0	98.4107	58.1084
SUB LVL-2	D4	0	0	0	98.4554	58.0981
SUB LVL-3	D3	0	0	0	98.4636	58.1033
SUB LVL-4	D2	0	0	0	98.3926	58.0796
SUB LVL-5	D1	0	0	0	122.0605	82.6844

**Table 1.7 - Mass Summary by Story**

Story	UX lb-s <sup>2</sup> /ft	UY lb-s <sup>2</sup> /ft	UZ lb-s <sup>2</sup> /ft
THIRD LVL	82590.34	82590.34	0
SECOND LVL	122440.35	122440.35	0
FIRST LVL	113430.51	113430.51	0
GROUND FLOOR	113852.57	113852.57	0
BASEMENT	114780.85	114780.85	0
SUB LVL-1	114068.25	114068.25	0
SUB LVL-2	114192.67	114192.67	0
SUB LVL-3	114122.71	114122.71	0
SUB LVL-4	114204.87	114204.87	0
SUB LVL-5	71941.83	71941.83	0
Base	10738.55	10738.55	0

## 2 Properties

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

### 2.1 Materials

**Table 2.1 - Material Properties - Summary**

Name	Type	E lb/in <sup>2</sup>	v	Unit Weight lb/ft <sup>3</sup>	Design Strengths
5000Psi	Concrete	4286830	0.2	150	Fc=5000 lb/in <sup>2</sup>
6000Psi	Concrete	4695980	0.2	150	Fc=4000 lb/in <sup>2</sup>
A416Gr270	Tendon	28500000	0	490	Fy=245100 lb/in <sup>2</sup> , Fu=270000 lb/in <sup>2</sup>
A615Gr60	Rebar	29000000	0	490	Fy=60000 lb/in <sup>2</sup> , Fu=90000 lb/in <sup>2</sup>

### 2.2 Frame Sections

**Table 2.2 - Frame Sections - Summary**

Name	Material	Shape
10NLB58	5000Psi	Concrete Rectangular
10NLB65	5000Psi	Concrete Rectangular
10SP48	5000Psi	Concrete Rectangular
10SP58	5000Psi	Concrete Rectangular
10SP68	5000Psi	Concrete Rectangular
10SP76	5000Psi	Concrete Rectangular
10SP82	5000Psi	Concrete Rectangular
12C29.5	6000Psi	Concrete Rectangular
12NLB27.25	5000Psi	Concrete Rectangular
12NLB68	5000Psi	Concrete Rectangular
12WP120	5000Psi	Concrete Rectangular
12WP68	5000Psi	Concrete Rectangular
13SP63	5000Psi	Concrete Rectangular
36C30	6000Psi	Concrete Rectangular
40IT32	5000Psi	Concrete Rectangular
40IT33.25	5000Psi	Concrete Rectangular
41C30	6000Psi	Concrete Rectangular
42C30	6000Psi	Concrete Rectangular
NULL BEAM	5000Psi	Concrete Rectangular

### 2.3 Shell Sections

**Table 2.3 - Shell Sections - Summary**

Name	Design Type	Element Type	Material	Total Thickness in
10" SLAB	Slab	Membrane	5000Psi	10
12"WP	Wall	Shell-Thin	5000Psi	12
12DT30	Slab	Membrane	5000Psi	6.47
12DT34	Slab	Membrane	5000Psi	6.77
14" LW	Wall	Shell-Thin	5000Psi	14

**Table 2.3 - Shell Sections - Summary (continued)**

<b>Name</b>	<b>Design Type</b>	<b>Element Type</b>	<b>Material</b>	<b>Total Thickness in</b>
15" WP	Wall	Shell-Thin	5000Psi	15
16" SW	Wall	Shell-Thin	5000Psi	16
16" WP	Wall	Shell-Thin	5000Psi	16
19" WP	Wall	Shell-Thin	5000Psi	19



### 3 Loads

This chapter provides loading information as applied to the model.

#### 3.1 Load Patterns

**Table 3.1 - Load Patterns**

Name	Type	Self Weight Multiplier	Auto Load
Dead	Dead	1	
Extra Dead	Dead	0	
EQX1	Seismic	0	ASCE 7-10
EQX2	Seismic	0	ASCE 7-10
EQX3	Seismic	0	ASCE 7-10
EQY1	Seismic	0	ASCE 7-10
EQY2	Seismic	0	ASCE 7-10
EQY3	Seismic	0	ASCE 7-10
Wind-X	Wind	0	ASCE 7-10
Wind-Y	Wind	0	ASCE 7-10

#### 3.2 Auto Wind Loading

**Table 3.2 - Auto Wind - ASCE 7-10 (Part 1 of 2)**

Load Pattern	Loading Method	Exposure Width Type	Angle deg	Cp,wind	Cp,lee	ASCE Case	e1	e2	Top Story	Bottom Story
Wind-X	Diaphragms	From Diaphragms	0	0.8	0.352893	Case 1	0.15	0.15	THIRD LVL	Base
Wind-Y	Diaphragms	From Diaphragms	90	0.8	0.5	Case 1	0.15	0.15	THIRD LVL	Base

**Table 3.2 - Auto Wind - ASCE 7-10 (Part 2 of 2)**

Include Parapet	Parapet Height ft	Wind Speed mph	Exposure Type	I	Kzt	G	Kd
Yes	4	120	B	1	1	0.85	0.85
Yes	4	120	B	1	1	0.85	0.85

## ASCE 7-10 Auto Wind Load Calculation

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

### Exposure Parameters

Exposure From = Diaphragms

Exposure Category = B

Wind Direction = 0 degrees

Basic Wind Speed, V [ASCE 26.5.1]

$V = 120 \text{ mph}$

Windward Coefficient,  $C_{p,wind}$  [ASCE 27.4.1]

$C_{p,wind} = 0.8$

Leeward Coefficient,  $C_{p,lee}$  [ASCE 27.4.1]

$C_{p,lee} = 0.352893$

Wind Case = Case 1

Top Story = THIRD LVL

Bottom Story = Base

Include Parapet = Yes, Parapet Height = 4

### Factors and Coefficients

Gradient Height,  $z_g$  [ASCE Table 26.9-1]

$z_g = 1200$

Emperical Exponent,  $\alpha$  [ASCE Table 26.9-1]

$\alpha = 7$

Velocity Pressure Exposure Coefficient,  $K_z$  [ASCE Table 27.3-1]

$$K_z = 2.01 \left( \frac{z}{z_g} \right)^{\frac{2}{\alpha}} \text{ for } 15\text{ft} \leq z \leq z_g$$

$$K_z = 2.01 \left( \frac{15}{z_g} \right)^{\frac{2}{\alpha}} \text{ for } z < 15\text{ft}$$

Topographical Factor,  $K_{zt}$  [ASCE 26.8.2]

$K_{zt} = 1$

Directionality Factor,  $K_d$  [ASCE 26.6]

$K_d = 0.85$

Gust Effect Factor, G [ASCE 26.9]

$G = 0.85$

### Lateral Loading

Velocity Pressure,  $q_z$  [ASCE 27.3.2 Eq. 27.3-1]

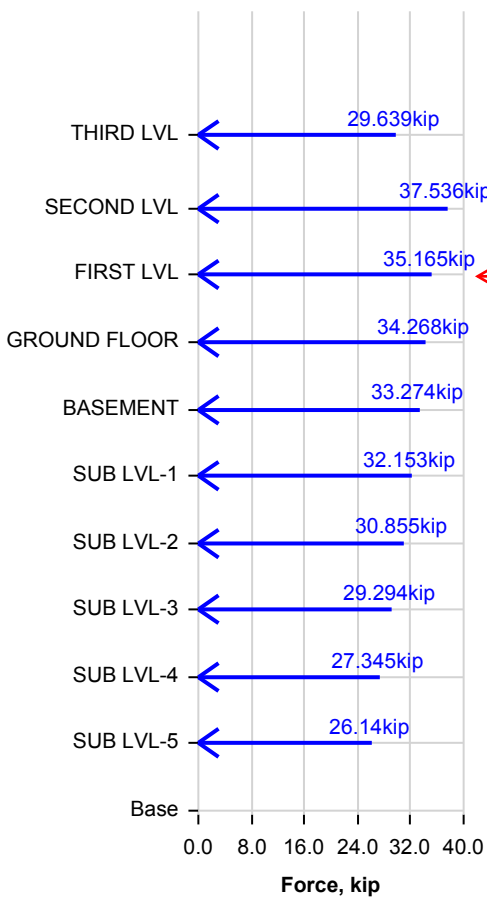
$$q_z = 0.00256 K_z K_{zt} K_d V^2$$

Design Wind Pressure, p [ASCE 27.4.2 Eq. 27.4-2]

$$p = qG C_{p,wind} + q_h (G C_{p,lee})$$

### Applied Story Forces

**Lateral Load to Stories -**



(Base shear @ Top of Existing Level= 29.6K + 37.5 K + 35.2 K = 102.3K)

Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	29.639	0
SECOND LVL	162.58	37.536	0
FIRST LVL	152.58	35.165	0
GROUND FLOOR	142.58	34.268	0
BASEMENT	132.58	33.274	0
SUB LVL-1	122.58	32.153	0
SUB LVL-2	112.58	30.855	0
SUB LVL-3	102.58	29.294	0
SUB LVL-4	92.58	27.345	0
SUB LVL-5	82.58	26.14	0
Base	72.58	0	0

## ASCE 7-10 Auto Wind Load Calculation

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

### Exposure Parameters

Exposure From = Diaphragms

Exposure Category = B

Wind Direction = 90 degrees

Basic Wind Speed, V [ASCE 26.5.1]

$V = 120 \text{ mph}$

Windward Coefficient,  $C_{p,wind}$  [ASCE 27.4.1]

$C_{p,wind} = 0.8$

Leeward Coefficient,  $C_{p,lee}$  [ASCE 27.4.1]

$C_{p,lee} = 0.5$

Wind Case = Case 1

Top Story = THIRD LVL

Bottom Story = Base

Include Parapet = Yes, Parapet Height = 4

### Factors and Coefficients

Gradient Height,  $z_g$  [ASCE Table 26.9-1]

$z_g = 1200$

Emperical Exponent,  $\alpha$  [ASCE Table 26.9-1]

$\alpha = 7$

Velocity Pressure Exposure Coefficient,  $K_z$  [ASCE Table 27.3-1]

$$K_z = 2.01 \left( \frac{z}{z_g} \right)^{\frac{2}{\alpha}} \text{ for } 15\text{ft} \leq z \leq z_g$$

$$K_z = 2.01 \left( \frac{15}{z_g} \right)^{\frac{2}{\alpha}} \text{ for } z < 15\text{ft}$$

Topographical Factor,  $K_{zt}$  [ASCE 26.8.2]

$K_{zt} = 1$

Directionality Factor,  $K_d$  [ASCE 26.6]

$K_d = 0.85$

Gust Effect Factor, G [ASCE 26.9]

$G = 0.85$

### Lateral Loading

Velocity Pressure,  $q_z$  [ASCE 27.3.2 Eq. 27.3-1]

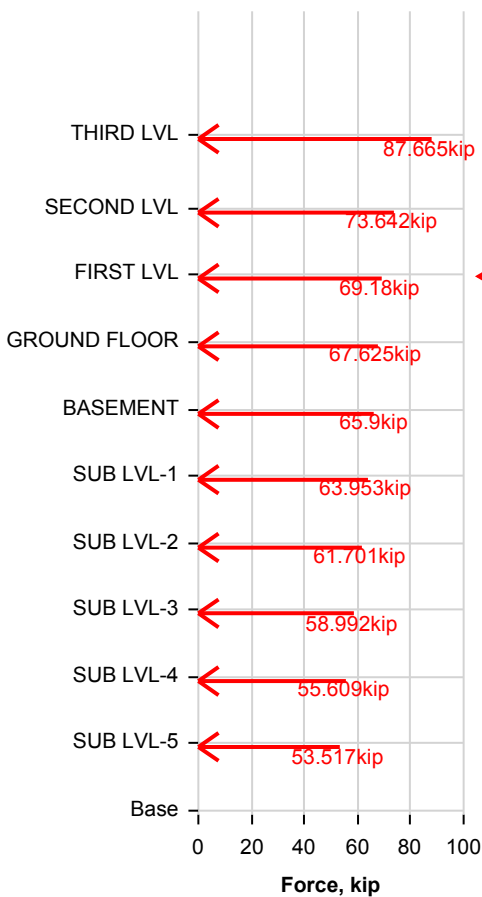
$$q_z = 0.00256 K_z K_{zt} K_d V^2$$

Design Wind Pressure, p [ASCE 27.4.2 Eq. 27.4-2]

$$p = qG C_{p,wind} + q_h (G C_{p,lee})$$

### Applied Story Forces

**Lateral Load to Stories -**



(Base shear @ Top of Existing Level=  
87.6K + 73.6 K + 69.1 K = 230.3K)

Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	0	87.665
SECOND LVL	162.58	0	73.642
FIRST LVL	152.58	0	69.18
GROUND FLOOR	142.58	0	67.625
BASEMENT	132.58	0	65.9
SUB LVL-1	122.58	0	63.953
SUB LVL-2	112.58	0	61.701
SUB LVL-3	102.58	0	58.992
SUB LVL-4	92.58	0	55.609
SUB LVL-5	82.58	0	53.517
Base	72.58	0	0

3.3 Auto Seismic Loading

Table 3.5 - Auto Seismic - ASCE 7-10 (Part 1 of 3)

Load Pattern	Type	Direction	Eccentricity %	Ecc. Overridden	Period Method	Ct (ft), x	Top Story	Bottom Story	R	Ω
EQX1	Seismic	X		No	Approximate	0.02ft, 0.75	THIRD LVL	Base	4	2.5
EQX2	Seismic	X + Ecc. Y	5	No	Approximate	0.02ft, 0.75	THIRD LVL	Base	4	2.5
EQX3	Seismic	X - Ecc. Y	5	No	Approximate	0.02ft, 0.75	THIRD LVL	Base	4	2.5
EQY1	Seismic	Y		No	Approximate	0.02ft, 0.75	THIRD LVL	Base	5	2.5
EQY2	Seismic	Y + Ecc. X	5	No	Approximate	0.02ft, 0.75	THIRD LVL	Base	5	2.5
EQY3	Seismic	Y - Ecc. X	5	No	Approximate	0.02ft, 0.75	THIRD LVL	Base	5	2.5

Table 3.5 - Auto Seismic - ASCE 7-10 (Part 2 of 3)

Cd	I	Ss/S1 Source	Ss	S1	TL sec	Site Class	Fa	Fv	SDS	SD1	Period Used sec
4	1	User Specified	0.242	0.078	6	D	1.6	2.4	0.258133	0.1248	0.636
4	1	User Specified	0.242	0.078	6	D	1.6	2.4	0.258133	0.1248	0.636
4	1	User Specified	0.242	0.078	6	D	1.6	2.4	0.258133	0.1248	0.636
4.5	1	User Specified	0.242	0.078	6	D	1.6	2.4	0.258133	0.1248	0.636
4.5	1	User Specified	0.242	0.078	6	D	1.6	2.4	0.258133	0.1248	0.636
4.5	1	User Specified	0.242	0.078	6	D	1.6	2.4	0.258133	0.1248	0.636

Table 3.5 - Auto Seismic - ASCE 7-10 (Part 3 of 3)

Weight Used kip	Base Shear kip
34607.21	1696.423
34607.21	1696.423
34607.21	1696.423
34607.21	1357.139
34607.21	1357.139
34607.21	1357.139

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQX1 according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = X

Eccentricity Ratio = 0% for all diaphragms

### Structural Period

Period Calculation Method = Approximate

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,  $h_n$

$$h_n = 100.85 \text{ ft}$$

Approximate Fundamental Period,  $T_a$   
[ASCE 12.8.2.1 Eq. 12.8-7]

$$T_a = C_t h_n^x$$

$$T_a = 0.636 \text{ sec}$$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]

$$T_L = 6 \text{ sec}$$

### Factors and Coefficients

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

$$R = 4$$

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

$$\Omega_0 = 2.5$$

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

$$C_d = 4$$

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

$$I = 1$$

S<sub>s</sub> and S<sub>1</sub> Source = User Specified

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

$$S_s = 0.242g$$

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

$$S_1 = 0.078g$$

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

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

$$F_a = 1.6$$

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

$$F_v = 2.4$$

### Seismic Response

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

$$S_{MS} = F_a S_s$$

$$S_{MS} = 0.3872g$$

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

$$S_{M1} = F_v S_1$$

$$S_{M1} = 0.1872g$$

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

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

$$S_{DS} = 0.258133g$$

Loads

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

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

$$S_{D1} = 0.1248g$$

**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]

$$C_{s,min} = \max (0.044 S_{DS} I, 0.01 ) = 0.011358$$

[ASCE 12.8.1.1, Eq. 12.8-6]

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

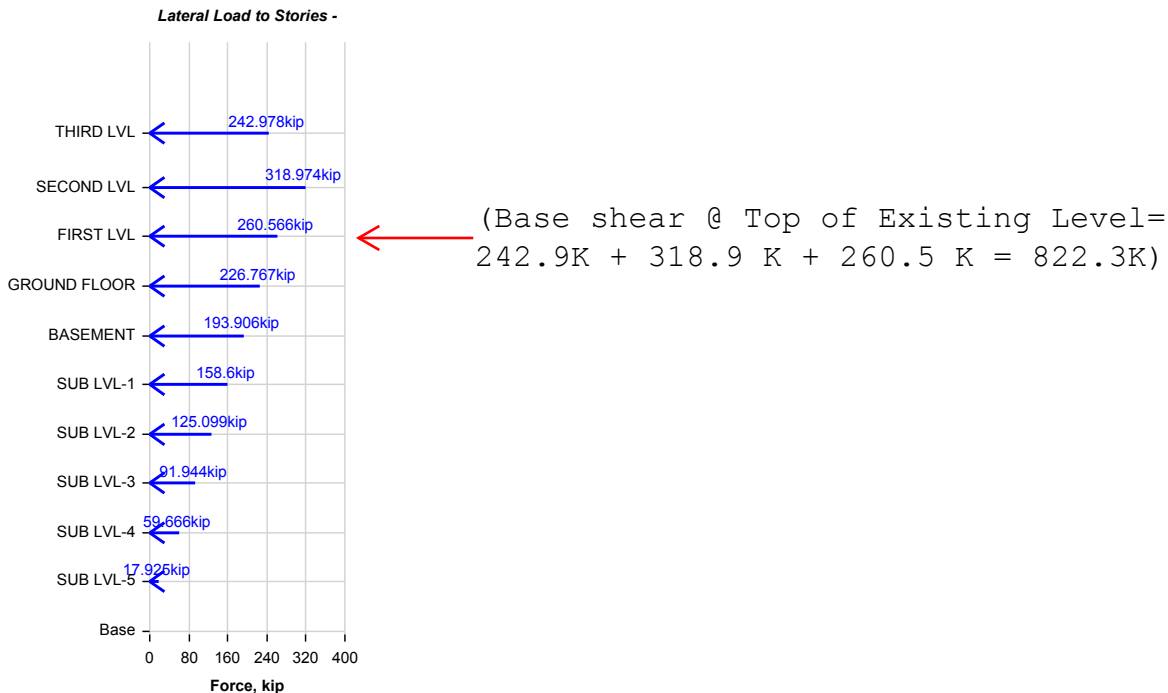
$$C_{s,min} \leq C_s \leq C_{s,max}$$

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
X	0.636	0.049019	34607.2096	1696.4234

**Applied Story Forces**





Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	242.978	0
SECOND LVL	162.58	318.974	0
FIRST LVL	152.58	260.566	0
GROUND FLOOR	142.58	226.767	0
BASEMENT	132.58	193.906	0
SUB LVL-1	122.58	158.6	0
SUB LVL-2	112.58	125.099	0
SUB LVL-3	102.58	91.944	0
SUB LVL-4	92.58	59.666	0
SUB LVL-5	82.58	17.925	0
Base	72.58	0	0

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQX2 according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = X + Eccentricity Y

Eccentricity Ratio = 5% for all diaphragms

### Structural Period

Period Calculation Method = Approximate

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,  $h_n$

$$h_n = 100.85 \text{ ft}$$

Approximate Fundamental Period,  $T_a$   
[ASCE 12.8.2.1 Eq. 12.8-7]

$$T_a = C_t h_n^x$$

$$T_a = 0.636 \text{ sec}$$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]

$$T_L = 6 \text{ sec}$$

### Factors and Coefficients

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

$$R = 4$$

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

$$\Omega_0 = 2.5$$

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

$$C_d = 4$$

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

$$I = 1$$

Ss and S1 Source = User Specified

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

$$S_s = 0.242g$$

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

$$S_1 = 0.078g$$

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

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

$$F_a = 1.6$$

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

$$F_v = 2.4$$

### Seismic Response

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

$$S_{MS} = F_a S_s$$

$$S_{MS} = 0.3872g$$

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

$$S_{M1} = F_v S_1$$

$$S_{M1} = 0.1872g$$

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

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

$$S_{DS} = 0.258133g$$

Loads

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

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

$$S_{D1} = 0.1248g$$

**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]

$$C_{s,min} = \max (0.044 S_{DS} I, 0.01 ) = 0.011358$$

[ASCE 12.8.1.1, Eq. 12.8-6]

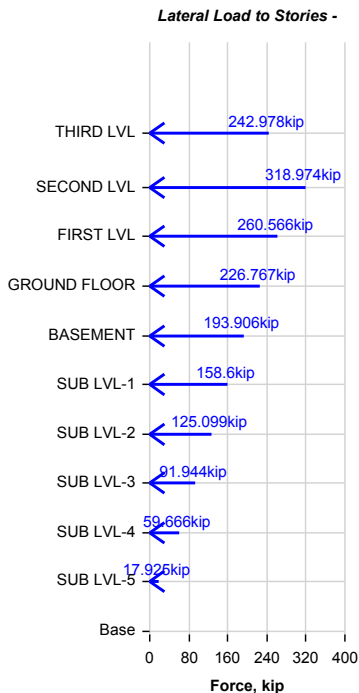
$$C_{s,min} = 0.5 \frac{S_1}{\left(\frac{R}{I}\right)} \text{ for } S_1 = 0.6g$$

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

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
X + Ecc. Y	0.636	0.049019	34607.2096	1696.4234

**Applied Story Forces**



Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	242.978	0
SECOND LVL	162.58	318.974	0
FIRST LVL	152.58	260.566	0
GROUND FLOOR	142.58	226.767	0
BASEMENT	132.58	193.906	0
SUB LVL-1	122.58	158.6	0
SUB LVL-2	112.58	125.099	0
SUB LVL-3	102.58	91.944	0
SUB LVL-4	92.58	59.666	0
SUB LVL-5	82.58	17.925	0
Base	72.58	0	0

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQX3 according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = X - Eccentricity Y

Eccentricity Ratio = 5% for all diaphragms

### Structural Period

Period Calculation Method = Approximate

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,  $h_n$

$$h_n = 100.85 \text{ ft}$$

Approximate Fundamental Period,  $T_a$   
[ASCE 12.8.2.1 Eq. 12.8-7]

$$T_a = C_t h_n^x$$

$$T_a = 0.636 \text{ sec}$$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]

$$T_L = 6 \text{ sec}$$

### Factors and Coefficients

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

$$R = 4$$

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

$$\Omega_0 = 2.5$$

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

$$C_d = 4$$

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

$$I = 1$$

$S_s$  and  $S_1$  Source = User Specified

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

$$S_s = 0.242g$$

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

$$S_1 = 0.078g$$

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

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

$$F_a = 1.6$$

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

$$F_v = 2.4$$

### Seismic Response

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

$$S_{MS} = F_a S_s$$

$$S_{MS} = 0.3872g$$

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

$$S_{M1} = F_v S_1$$

$$S_{M1} = 0.1872g$$

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

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

$$S_{DS} = 0.258133g$$

Loads

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

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

$$S_{D1} = 0.1248g$$

**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]

$$C_{s,min} = \max (0.044 S_{DS} I, 0.01 ) = 0.011358$$

[ASCE 12.8.1.1, Eq. 12.8-6]

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

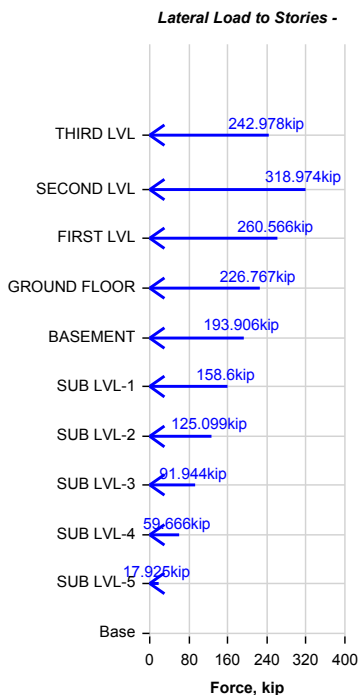
$$C_{s,min} \leq C_s \leq C_{s,max}$$

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
X - Ecc. Y	0.636	0.049019	34607.2096	1696.4234

**Applied Story Forces**

Loads



Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	242.978	0
SECOND LVL	162.58	318.974	0
FIRST LVL	152.58	260.566	0
GROUND FLOOR	142.58	226.767	0
BASEMENT	132.58	193.906	0
SUB LVL-1	122.58	158.6	0
SUB LVL-2	112.58	125.099	0
SUB LVL-3	102.58	91.944	0
SUB LVL-4	92.58	59.666	0
SUB LVL-5	82.58	17.925	0
Base	72.58	0	0

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQY1 according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = Y

Eccentricity Ratio = 0% for all diaphragms

### Structural Period

Period Calculation Method = Approximate

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,  $h_n$

$$h_n = 100.85 \text{ ft}$$

Approximate Fundamental Period,  $T_a$   
[ASCE 12.8.2.1 Eq. 12.8-7]

$$T_a = C_t h_n^x$$

$$T_a = 0.636 \text{ sec}$$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]

$$T_L = 6 \text{ sec}$$

### Factors and Coefficients

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

$$R = 5$$

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

$$\Omega_0 = 2.5$$

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

$$C_d = 4.5$$

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

$$I = 1$$

Ss and S1 Source = User Specified

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

$$S_s = 0.242g$$

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

$$S_1 = 0.078g$$

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

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

$$F_a = 1.6$$

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

$$F_v = 2.4$$

### Seismic Response

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

$$S_{MS} = F_a S_s$$

$$S_{MS} = 0.3872g$$

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

$$S_{M1} = F_v S_1$$

$$S_{M1} = 0.1872g$$

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

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

$$S_{DS} = 0.258133g$$



Loads

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

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

$$S_{D1} = 0.1248g$$

**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]

$$C_{s,min} = \max (0.044 S_{DS} I, 0.01 ) = 0.011358$$

[ASCE 12.8.1.1, Eq. 12.8-6]

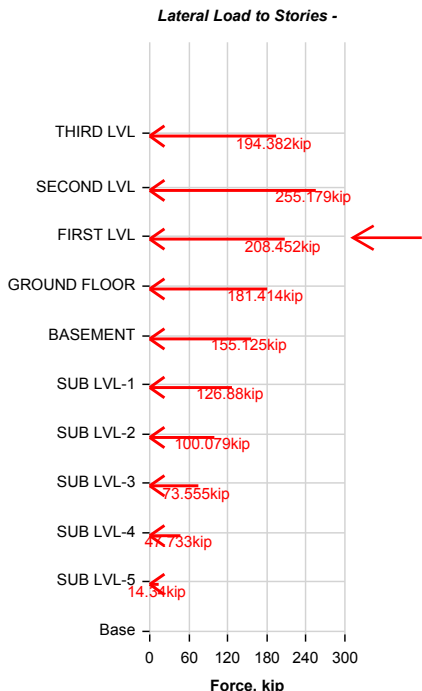
$$C_{s,min} = 0.5 \frac{S_1}{\left(\frac{R}{I}\right)} \text{ for } S_1 = 0.6g$$

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

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
Y	0.636	0.039215	34607.2096	1357.1387

**Applied Story Forces**



(Base shear @ Top of Existing Level= 194.3K + 255.2 K + 208.4 K = 657.9K)

Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	0	194.382
SECOND LVL	162.58	0	255.179
FIRST LVL	152.58	0	208.452
GROUND FLOOR	142.58	0	181.414
BASEMENT	132.58	0	155.125
SUB LVL-1	122.58	0	126.88
SUB LVL-2	112.58	0	100.079
SUB LVL-3	102.58	0	73.555
SUB LVL-4	92.58	0	47.733
SUB LVL-5	82.58	0	14.34
Base	72.58	0	0

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQY2 according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = Y + Eccentricity X

Eccentricity Ratio = 5% for all diaphragms

### Structural Period

Period Calculation Method = Approximate

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,  $h_n$

$$h_n = 100.85 \text{ ft}$$

Approximate Fundamental Period,  $T_a$   
[ASCE 12.8.2.1 Eq. 12.8-7]

$$T_a = C_t h_n^x$$

$$T_a = 0.636 \text{ sec}$$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]

$$T_L = 6 \text{ sec}$$

### Factors and Coefficients

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

$$R = 5$$

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

$$\Omega_0 = 2.5$$

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

$$C_d = 4.5$$

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

$$I = 1$$

Ss and S1 Source = User Specified

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

$$S_s = 0.242g$$

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

$$S_1 = 0.078g$$

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

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

$$F_a = 1.6$$

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

$$F_v = 2.4$$

### Seismic Response

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

$$S_{MS} = F_a S_s$$

$$S_{MS} = 0.3872g$$

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

$$S_{M1} = F_v S_1$$

$$S_{M1} = 0.1872g$$

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

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

$$S_{DS} = 0.258133g$$

## Loads

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

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

$$S_{D1} = 0.1248g$$

**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]

$$C_{s,min} = \max(0.044 S_{DS}, 0.01) = 0.011358$$

[ASCE 12.8.1.1, Eq. 12.8-6]

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

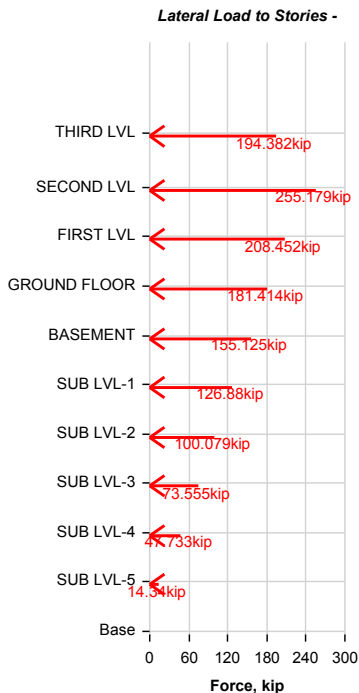
$$C_{s,min} \leq C_s \leq C_{s,max}$$

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
Y + Ecc. X	0.636	0.039215	34607.2096	1357.1387

**Applied Story Forces**

Loads



Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	0	194.382
SECOND LVL	162.58	0	255.179
FIRST LVL	152.58	0	208.452
GROUND FLOOR	142.58	0	181.414
BASEMENT	132.58	0	155.125
SUB LVL-1	122.58	0	126.88
SUB LVL-2	112.58	0	100.079
SUB LVL-3	102.58	0	73.555
SUB LVL-4	92.58	0	47.733
SUB LVL-5	82.58	0	14.34
Base	72.58	0	0

## ASCE 7-10 Auto Seismic Load Calculation

This calculation presents the automatically generated lateral seismic loads for load pattern EQY3 according to ASCE 7-10, as calculated by ETABS.

### Direction and Eccentricity

Direction = Y - Eccentricity X

Eccentricity Ratio = 5% for all diaphragms

### Structural Period

Period Calculation Method = Approximate

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,  $h_n$

$$h_n = 100.85 \text{ ft}$$

Approximate Fundamental Period,  $T_a$   
[ASCE 12.8.2.1 Eq. 12.8-7]

$$T_a = C_t h_n^x$$

$$T_a = 0.636 \text{ sec}$$

Long-Period Transition Period,  $T_L$  [ASCE 11.4.5]

$$T_L = 6 \text{ sec}$$

### Factors and Coefficients

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

$$R = 5$$

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

$$\Omega_0 = 2.5$$

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

$$C_d = 4.5$$

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

$$I = 1$$

Ss and S1 Source = User Specified

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

$$S_s = 0.242g$$

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

$$S_1 = 0.078g$$

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

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

$$F_a = 1.6$$

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

$$F_v = 2.4$$

### Seismic Response

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

$$S_{MS} = F_a S_s$$

$$S_{MS} = 0.3872g$$

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

$$S_{M1} = F_v S_1$$

$$S_{M1} = 0.1872g$$

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

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

$$S_{DS} = 0.258133g$$

Loads

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

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

$$S_{D1} = 0.1248g$$

**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]

$$C_{s,min} = \max (0.044 S_{DS} I, 0.01 ) = 0.011358$$

[ASCE 12.8.1.1, Eq. 12.8-6]

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

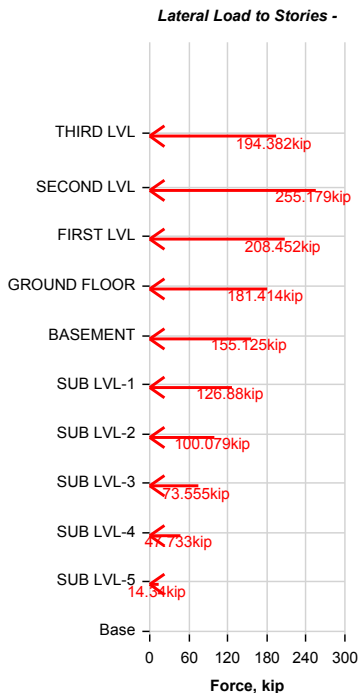
$$C_{s,min} \leq C_s \leq C_{s,max}$$

**Calculated Base Shear**

Direction	Period Used (sec)	$C_s$	W (kip)	V (kip)
Y - Ecc. X	0.636	0.039215	34607.2096	1357.1387

**Applied Story Forces**

Loads



Story	Elevation ft	X-Dir kip	Y-Dir kip
THIRD LVL	173.43	0	194.382
SECOND LVL	162.58	0	255.179
FIRST LVL	152.58	0	208.452
GROUND FLOOR	142.58	0	181.414
BASEMENT	132.58	0	155.125
SUB LVL-1	122.58	0	126.88
SUB LVL-2	112.58	0	100.079
SUB LVL-3	102.58	0	73.555
SUB LVL-4	92.58	0	47.733
SUB LVL-5	82.58	0	14.34
Base	72.58	0	0



### 3.4 Load Cases

**Table 3.12 - Load Cases - Summary**

<b>Name</b>	<b>Type</b>
Dead	Linear Static
Extra Dead	Linear Static
EQX1	Linear Static
EQX2	Linear Static
EQX3	Linear Static
EQY1	Linear Static
EQY2	Linear Static
EQY3	Linear Static
Wind-X	Linear Static
Wind-Y	Linear Static

## 4 Analysis Results

This chapter provides analysis results.

### 4.1 Line Results

Table 4.1 - Pier Forces

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
THIRD LVL	WP3	Dead	Top	-48.447	-22.903	0.175	-3.1344	-8.832E-06	20.4564
THIRD LVL	WP3	Dead	Bottom	-83.676	-22.903	0.175	-3.1344	1.8979	-228.039
THIRD LVL	WP3	Extra Dead	Top	-286.133	-57.371	-0.151	6.8117	-1.739E-05	179.409
THIRD LVL	WP3	Extra Dead	Bottom	-286.133	-57.371	-0.151	6.8117	-1.6433	-443.0646
THIRD LVL	WP3	EQX1	Top	0	-17.746	1.147	5.3573	5.506E-06	0.0004
THIRD LVL	WP3	EQX1	Bottom	0	-17.746	1.147	5.3573	12.4439	-192.546
THIRD LVL	WP3	EQX2	Top	0	-16.134	1.16	2.6327	4.705E-06	0.0002
THIRD LVL	WP3	EQX2	Bottom	0	-16.134	1.16	2.6327	12.5844	-175.0536
THIRD LVL	WP3	EQX3	Top	0	-19.358	1.134	8.0819	6.308E-06	0.0006
THIRD LVL	WP3	EQX3	Bottom	0	-19.358	1.134	8.0819	12.3035	-210.0384
THIRD LVL	WP3	EQY1	Top	-1.813E-05	40.869	-0.093	-8.8049	0	-0.003
THIRD LVL	WP3	EQY1	Bottom	-1.813E-05	40.869	-0.093	-8.8049	-1.009	443.428
THIRD LVL	WP3	EQY2	Top	-1.615E-05	36.771	-0.101	-4.7485	0	-0.0026
THIRD LVL	WP3	EQY2	Bottom	-1.615E-05	36.771	-0.101	-4.7485	-1.0961	398.965
THIRD LVL	WP3	EQY3	Top	-2.012E-05	44.967	-0.085	-12.8614	-7.027E-07	-0.0033
THIRD LVL	WP3	EQY3	Bottom	-2.012E-05	44.967	-0.085	-12.8614	-0.9219	487.8909
THIRD LVL	WP3	Wind-X	Top	0	-1.737	-0.468	-0.2702	2.591E-05	4.274E-05
THIRD LVL	WP3	Wind-X	Bottom	0	-1.737	-0.468	-0.2702	-5.0817	-18.8437
THIRD LVL	WP3	Wind-Y	Top	-6.058E-06	11.86	0.147	-0.7882	-8.711E-06	-0.001
THIRD LVL	WP3	Wind-Y	Bottom	-6.059E-06	11.86	0.147	-0.7882	1.5919	128.684
THIRD LVL	WP4	Dead	Top	-11.356	-5.713	0.074	-0.591	-2.128E-05	33.6647
THIRD LVL	WP4	Dead	Bottom	-21.574	-5.713	0.074	-0.591	0.8004	-28.6269
THIRD LVL	WP4	Extra Dead	Top	-55.924	-15.956	-0.012	1.6864	-0.0001	146.2385
THIRD LVL	WP4	Extra Dead	Bottom	-55.924	-15.956	-0.012	1.6864	-0.1283	-26.8842
THIRD LVL	WP4	EQX1	Top	0.002	-0.728	0.339	0.9315	-1.028E-06	0.0086
THIRD LVL	WP4	EQX1	Bottom	0.002	-0.728	0.339	0.9315	3.6805	-7.8868
THIRD LVL	WP4	EQX2	Top	0.001	-0.717	0.342	0.2132	-1.1E-06	0.0044
THIRD LVL	WP4	EQX2	Bottom	0.001	-0.717	0.342	0.2132	3.708	-7.7708
THIRD LVL	WP4	EQX3	Top	0.003	-0.739	0.337	1.6499	-9.562E-07	0.0127
THIRD LVL	WP4	EQX3	Bottom	0.003	-0.739	0.337	1.6499	3.653	-8.0028
THIRD LVL	WP4	EQY1	Top	-0.013	1.32	-0.035	-2.2273	0	-0.0585
THIRD LVL	WP4	EQY1	Bottom	-0.013	1.32	-0.035	-2.2273	-0.3744	14.2641
THIRD LVL	WP4	EQY2	Top	-0.011	1.205	-0.042	-0.9336	-5.088E-07	-0.0521
THIRD LVL	WP4	EQY2	Bottom	-0.011	1.205	-0.042	-0.9336	-0.4508	13.0208
THIRD LVL	WP4	EQY3	Top	-0.014	1.435	-0.027	-3.5209	1.468E-06	-0.0649
THIRD LVL	WP4	EQY3	Bottom	-0.014	1.435	-0.027	-3.5209	-0.2979	15.5073
THIRD LVL	WP4	Wind-X	Top	0.000168	0.021	-0.000424	-1.9738	1.3E-05	0.0008
THIRD LVL	WP4	Wind-X	Bottom	0.000168	0.021	-0.000424	-1.9738	-0.0046	0.2258
THIRD LVL	WP4	Wind-Y	Top	-0.004	0.395	-0.018	0.4896	-4.359E-06	-0.0195
THIRD LVL	WP4	Wind-Y	Bottom	-0.004	0.395	-0.018	0.4896	-0.1931	4.2715
THIRD LVL	SW1	Dead	Top	-36.963	-9.52	-0.374	-6.9838	5.083E-06	-90.6241

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
THIRD LVL	SW1	Dead	Bottom	-73.129	-9.52	-0.374	-6.9838	-4.056	-193.9131
THIRD LVL	SW1	Extra Dead	Top	-136.593	10.012	-0.543	7.0746	1.123E-05	-473.2039
THIRD LVL	SW1	Extra Dead	Bottom	-136.593	10.012	-0.543	7.0746	-5.8934	-364.5768
THIRD LVL	SW1	EQX1	Top	9.097E-06	-19.265	2.209	5.7265	-2.438E-06	0.0001
THIRD LVL	SW1	EQX1	Bottom	9.097E-06	-19.265	2.209	5.7265	23.9645	-209.0281
THIRD LVL	SW1	EQX2	Top	0	-17.624	2.2	1.3026	-2.072E-06	0.0001
THIRD LVL	SW1	EQX2	Bottom	0	-17.624	2.2	1.3026	23.8706	-191.2191
THIRD LVL	SW1	EQX3	Top	1.358E-05	-20.907	2.217	10.1503	-2.805E-06	0.0001
THIRD LVL	SW1	EQX3	Bottom	1.358E-05	-20.907	2.217	10.1503	24.0584	-226.8371
THIRD LVL	SW1	EQY1	Top	-6.247E-05	37.153	0.493	-11.4653	0	-0.0007
THIRD LVL	SW1	EQY1	Bottom	-6.247E-05	37.153	0.493	-11.4653	5.3478	403.1112
THIRD LVL	SW1	EQY2	Top	-5.559E-05	33.153	0.548	-4.1289	0	-0.0006
THIRD LVL	SW1	EQY2	Bottom	-5.559E-05	33.153	0.548	-4.1289	5.9501	359.7041
THIRD LVL	SW1	EQY3	Top	-6.935E-05	41.154	0.437	-18.8018	0	-0.0008
THIRD LVL	SW1	EQY3	Bottom	-6.935E-05	41.154	0.437	-18.8018	4.7455	446.5182
THIRD LVL	SW1	Wind-X	Top	0	-3.439	0.264	15.1138	-1.262E-05	1.052E-05
THIRD LVL	SW1	Wind-X	Bottom	0	-3.439	0.264	15.1138	2.8609	-37.315
THIRD LVL	SW1	Wind-Y	Top	-2.082E-05	10.255	0.263	-6.064	4.245E-06	-0.0002
THIRD LVL	SW1	Wind-Y	Bottom	-2.082E-05	10.255	0.263	-6.064	2.849	111.2689
THIRD LVL	SW2	Dead	Top	-97.148	28.641	-0.177	-2.8505	0.044	-254.9893
THIRD LVL	SW2	Dead	Bottom	-120.098	28.641	-0.177	-2.8505	-1.8721	60.5687
THIRD LVL	SW2	Extra Dead	Top	-317.368	87.975	-0.197	7.7248	0.0467	-945.7458
THIRD LVL	SW2	Extra Dead	Bottom	-317.368	87.975	-0.197	7.7248	-2.0939	8.7793
THIRD LVL	SW2	EQX1	Top	0.087	-11.239	1.247	7.1445	0.0441	-0.6534
THIRD LVL	SW2	EQX1	Bottom	0.087	-11.239	1.247	7.1445	13.5723	-122.5925
THIRD LVL	SW2	EQX2	Top	0.087	-9.907	1.226	4.0458	0.0442	-0.6545
THIRD LVL	SW2	EQX2	Bottom	0.087	-9.907	1.226	4.0458	13.3506	-108.1506
THIRD LVL	SW2	EQX3	Top	0.087	-12.57	1.267	10.2432	0.044	-0.6523
THIRD LVL	SW2	EQX3	Bottom	0.087	-12.57	1.267	10.2432	13.7939	-137.0343
THIRD LVL	SW2	EQY1	Top	0.001	43.376	0.136	-9.3869	0.0008	-0.0115
THIRD LVL	SW2	EQY1	Bottom	0.001	43.376	0.136	-9.3869	1.4787	470.6216
THIRD LVL	SW2	EQY2	Top	0.001	41.261	0.161	-4.0631	0.0006	-0.0091
THIRD LVL	SW2	EQY2	Bottom	0.001	41.261	0.161	-4.0631	1.7503	447.6701
THIRD LVL	SW2	EQY3	Top	0.002	45.492	0.111	-14.7108	0.0009	-0.0138
THIRD LVL	SW2	EQY3	Bottom	0.002	45.492	0.111	-14.7108	1.2072	493.573
THIRD LVL	SW2	Wind-X	Top	0.012	-0.593	0.37	-7.1918	0.0062	-0.0923
THIRD LVL	SW2	Wind-X	Bottom	0.012	-0.593	0.37	-7.1918	4.0208	-6.5224
THIRD LVL	SW2	Wind-Y	Top	0.0002797	15.725	-0.026	2.5491	0.0001	-0.0022
THIRD LVL	SW2	Wind-Y	Bottom	0.0002797	15.725	-0.026	2.5491	-0.2796	170.6118
THIRD LVL	SW4	Dead	Top	-36.891	-21.788	0.295	-3.3918	-0.0347	-505.4484
THIRD LVL	SW4	Dead	Bottom	-85.958	-21.788	0.295	-3.3918	3.1652	-739.172
THIRD LVL	SW4	Extra Dead	Top	-11.454	-10.342	-0.163	11.327	-0.0038	-156.7437
THIRD LVL	SW4	Extra Dead	Bottom	-11.454	-10.342	-0.163	11.327	-1.7677	-268.9586
THIRD LVL	SW4	EQX1	Top	-0.086	43.642	3.15	-8.2382	0.0434	-7.797E-06
THIRD LVL	SW4	EQX1	Bottom	-0.086	43.642	3.15	-8.2382	34.2192	473.5168

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
THIRD LVL	SW4	EQX2	Top	-0.086	40.235	3.219	-11.1829	0.0433	9.047E-07
THIRD LVL	SW4	EQX2	Bottom	-0.086	40.235	3.219	-11.1829	34.9663	436.5481
THIRD LVL	SW4	EQX3	Top	-0.086	47.049	3.081	-5.2936	0.0434	-1.65E-05
THIRD LVL	SW4	EQX3	Bottom	-0.086	47.049	3.081	-5.2936	33.4722	510.4856
THIRD LVL	SW4	EQY1	Top	-0.001	40.264	0.183	-15.9454	0.0006	-0.0001
THIRD LVL	SW4	EQY1	Bottom	-0.001	40.264	0.183	-15.9454	1.9814	436.8647
THIRD LVL	SW4	EQY2	Top	-0.001	47.695	0.067	-10.9195	0.0007	-0.0001
THIRD LVL	SW4	EQY2	Bottom	-0.001	47.695	0.067	-10.9195	0.729	517.4869
THIRD LVL	SW4	EQY3	Top	-0.001	32.833	0.298	-20.9712	0.0005	-0.0001
THIRD LVL	SW4	EQY3	Bottom	-0.001	32.833	0.298	-20.9712	3.2338	356.2425
THIRD LVL	SW4	Wind-X	Top	-0.012	5.102	0.643	-11.4042	0.0061	1.417E-05
THIRD LVL	SW4	Wind-X	Bottom	-0.012	5.102	0.643	-11.4042	6.9826	55.3569
THIRD LVL	SW4	Wind-Y	Top	-0.001	27.657	-0.056	-1.6484	0.0003	-0.0001
THIRD LVL	SW4	Wind-Y	Bottom	-0.001	27.657	-0.056	-1.6484	-0.6119	300.0765
THIRD LVL	LW1	Dead	Top	-24.111	11.369	-2.061	-7.161	0.0847	-50.7913
THIRD LVL	LW1	Dead	Bottom	-90.489	11.369	-2.061	-7.161	-22.2793	72.5665
THIRD LVL	LW1	Extra Dead	Top	-7.854	11.361	-1.373	20.4716	0.0625	-11.9394
THIRD LVL	LW1	Extra Dead	Bottom	-7.854	11.361	-1.373	20.4716	-14.8297	111.3276
THIRD LVL	LW1	EQX1	Top	152.494	83.405	-0.757	16.1516	0.0695	-2651.9907
THIRD LVL	LW1	EQX1	Bottom	152.494	83.405	-0.757	16.1516	-8.1456	-1747.0492
THIRD LVL	LW1	EQX2	Top	152.561	84.874	-0.78	8.7101	0.0813	-2653.1588
THIRD LVL	LW1	EQX2	Bottom	152.561	84.874	-0.78	8.7101	-8.3796	-1732.272
THIRD LVL	LW1	EQX3	Top	152.426	81.935	-0.734	23.5931	0.0577	-2650.8226
THIRD LVL	LW1	EQX3	Bottom	152.426	81.935	-0.734	23.5931	-7.9116	-1761.8264
THIRD LVL	LW1	EQY1	Top	-1.095	-12.323	1.432	-26.9942	-0.0808	18.8676
THIRD LVL	LW1	EQY1	Bottom	-1.095	-12.323	1.432	-26.9942	15.4542	-114.8331
THIRD LVL	LW1	EQY2	Top	-1.253	-15.627	1.528	-15.4125	-0.0997	21.6038
THIRD LVL	LW1	EQY2	Bottom	-1.253	-15.627	1.528	-15.4125	16.4831	-147.9484
THIRD LVL	LW1	EQY3	Top	-0.937	-9.018	1.335	-38.5759	-0.0619	16.1314
THIRD LVL	LW1	EQY3	Bottom	-0.937	-9.018	1.335	-38.5759	14.4252	-81.7179
THIRD LVL	LW1	Wind-X	Top	21.254	10.301	-0.473	0.5689	0.1707	-369.6265
THIRD LVL	LW1	Wind-X	Bottom	21.254	10.301	-0.473	0.5689	-4.9568	-257.8656
THIRD LVL	LW1	Wind-Y	Top	-0.901	-8.873	1.079	-2.8452	-0.1037	15.5612
THIRD LVL	LW1	Wind-Y	Bottom	-0.901	-8.873	1.079	-2.8452	11.6068	-80.7125
THIRD LVL	LW2	Dead	Top	-28.062	16.586	-2.991	-14.1327	-0.0847	-33.3904
THIRD LVL	LW2	Dead	Bottom	-94.439	16.586	-2.991	-14.1327	-32.5423	146.5632
THIRD LVL	LW2	Extra Dead	Top	-8.376	-0.948	-1.481	18.9125	-0.0625	-4.7074
THIRD LVL	LW2	Extra Dead	Bottom	-8.376	-0.948	-1.481	18.9125	-16.1306	-14.9903
THIRD LVL	LW2	EQX1	Top	-152.494	73.784	-0.397	18.2134	-0.0695	-2697.8136
THIRD LVL	LW2	EQX1	Bottom	-152.494	73.784	-0.397	18.2134	-4.3785	-1897.2542
THIRD LVL	LW2	EQX2	Top	-152.561	73.819	-0.499	11.1287	-0.0813	-2699.009
THIRD LVL	LW2	EQX2	Bottom	-152.561	73.819	-0.499	11.1287	-5.4947	-1898.0772
THIRD LVL	LW2	EQX3	Top	-152.427	73.75	-0.295	25.2981	-0.0576	-2696.6183
THIRD LVL	LW2	EQX3	Bottom	-152.427	73.75	-0.295	25.2981	-3.2623	-1896.4313
THIRD LVL	LW2	EQY1	Top	1.095	-3.046	0.745	-25.8366	0.0807	19.3934

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
THIRD LVL	LW2	EQY1	Bottom	1.095	-3.046	0.745	-25.8366	8.1629	-13.6606
THIRD LVL	LW2	EQY2	Top	1.253	-3.161	0.926	-15.0233	0.0996	22.2039
THIRD LVL	LW2	EQY2	Bottom	1.253	-3.161	0.926	-15.0233	10.1447	-12.0977
THIRD LVL	LW2	EQY3	Top	0.937	-2.931	0.564	-36.6499	0.0619	16.5829
THIRD LVL	LW2	EQY3	Bottom	0.937	-2.931	0.564	-36.6499	6.1811	-15.2236
THIRD LVL	LW2	Wind-X	Top	-21.254	9.234	0.254	3.0389	-0.1707	-376.0188
THIRD LVL	LW2	Wind-X	Bottom	-21.254	9.234	0.254	3.0389	2.5897	-275.8254
THIRD LVL	LW2	Wind-Y	Top	0.901	-3.105	0.604	-5.0399	0.1037	15.9923
THIRD LVL	LW2	Wind-Y	Bottom	0.901	-3.105	0.604	-5.0399	6.655	-17.6987
THIRD LVL	LW3	Dead	Top	-26.481	-44.339	-3.257	4.3155	-0.1004	12.8718
THIRD LVL	LW3	Dead	Bottom	-92.858	-44.339	-3.257	4.3155	-35.4427	-468.2017
THIRD LVL	LW3	Extra Dead	Top	-8.82	-6.476	-1.101	23.7379	-0.0145	12.5322
THIRD LVL	LW3	Extra Dead	Bottom	-8.82	-6.476	-1.101	23.7379	-11.9592	-57.7289
THIRD LVL	LW3	EQX1	Top	149.525	66.836	0.812	20.1149	0.0966	-2643.3943
THIRD LVL	LW3	EQX1	Bottom	149.525	66.836	0.812	20.1149	8.9109	-1918.229
THIRD LVL	LW3	EQX2	Top	149.402	66.149	0.8	12.8452	0.1007	-2641.2084
THIRD LVL	LW3	EQX2	Bottom	149.402	66.149	0.8	12.8452	8.7822	-1923.4942
THIRD LVL	LW3	EQX3	Top	149.648	67.522	0.825	27.3845	0.0925	-2645.5802
THIRD LVL	LW3	EQX3	Bottom	149.648	67.522	0.825	27.3845	9.0396	-1912.9638
THIRD LVL	LW3	EQY1	Top	1.19	5.749	0.665	-25.4687	0.0184	-21.0636
THIRD LVL	LW3	EQY1	Bottom	1.19	5.749	0.665	-25.4687	7.2389	41.3139
THIRD LVL	LW3	EQY2	Top	1.44	7.138	0.767	-14.2985	0.017	-25.5002
THIRD LVL	LW3	EQY2	Bottom	1.44	7.138	0.767	-14.2985	8.3344	51.9457
THIRD LVL	LW3	EQY3	Top	0.94	4.36	0.564	-36.6389	0.0198	-16.627
THIRD LVL	LW3	EQY3	Bottom	0.94	4.36	0.564	-36.6389	6.1433	30.682
THIRD LVL	LW3	Wind-X	Top	20.832	8.219	-0.281	2.2128	0.1416	-368.3261
THIRD LVL	LW3	Wind-X	Bottom	20.832	8.219	-0.281	2.2128	-2.9031	-279.155
THIRD LVL	LW3	Wind-Y	Top	0.9	3.812	1.017	-3.714	0.0208	-15.9653
THIRD LVL	LW3	Wind-Y	Bottom	0.9	3.812	1.017	-3.714	11.0552	25.3963
THIRD LVL	LW4	Dead	Top	-25.672	20.234	-2.105	1.1563	0.1004	15.313
THIRD LVL	LW4	Dead	Bottom	-92.049	20.234	-2.105	1.1563	-22.74	234.8536
THIRD LVL	LW4	Extra Dead	Top	-7.325	-5.905	-0.46	23.2335	0.0145	18.056
THIRD LVL	LW4	Extra Dead	Bottom	-7.325	-5.905	-0.46	23.2335	-4.9766	-46.0127
THIRD LVL	LW4	EQX1	Top	-149.526	46.646	1.238	14.8285	-0.0966	-2602.3357
THIRD LVL	LW4	EQX1	Bottom	-149.526	46.646	1.238	14.8285	13.3336	-2096.2289
THIRD LVL	LW4	EQX2	Top	-149.403	45.861	1.128	8.089	-0.1007	-2600.2006
THIRD LVL	LW4	EQX2	Bottom	-149.403	45.861	1.128	8.089	12.1345	-2102.6113
THIRD LVL	LW4	EQX3	Top	-149.649	47.431	1.348	21.5679	-0.0926	-2604.4707
THIRD LVL	LW4	EQX3	Bottom	-149.649	47.431	1.348	21.5679	14.5326	-2089.8465
THIRD LVL	LW4	EQY1	Top	-1.187	10.219	0.199	-29.6545	-0.0184	-20.5584
THIRD LVL	LW4	EQY1	Bottom	-1.187	10.219	0.199	-29.6545	2.1375	90.3149
THIRD LVL	LW4	EQY2	Top	-1.437	11.757	0.422	-19.4723	-0.017	-24.8959
THIRD LVL	LW4	EQY2	Bottom	-1.437	11.757	0.422	-19.4723	4.5655	102.6655
THIRD LVL	LW4	EQY3	Top	-0.937	8.681	-0.025	-39.8367	-0.0198	-16.2209
THIRD LVL	LW4	EQY3	Bottom	-0.937	8.681	-0.025	-39.8367	-0.2906	77.9643

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
THIRD LVL	LW4	Wind-X	Top	-20.832	5.509	0.557	2.0739	-0.1416	-362.5243
THIRD LVL	LW4	Wind-X	Bottom	-20.832	5.509	0.557	2.0739	5.9	-302.7526
THIRD LVL	LW4	Wind-Y	Top	-0.9	7.186	0.616	-9.3615	-0.0208	-15.5939
THIRD LVL	LW4	Wind-Y	Bottom	-0.9	7.186	0.616	-9.3615	6.662	62.3789
THIRD LVL	SW3	Dead	Top	-134.663	56.95	0.031	-3.314	-0.001	-538.8172
THIRD LVL	SW3	Dead	Bottom	-160.613	56.95	0.031	-3.314	0.3395	79.0909
THIRD LVL	SW3	Extra Dead	Top	-41.791	-3.472	-0.005	9.5351	-0.0002	-166.9085
THIRD LVL	SW3	Extra Dead	Bottom	-41.791	-3.472	-0.005	9.5351	-0.0522	-204.5767
THIRD LVL	SW3	EQX1	Top	-0.0004108	1.84	1.751	9.4971	0.0875	0.0025
THIRD LVL	SW3	EQX1	Bottom	-0.0004108	1.84	1.751	9.4971	19.0826	19.966
THIRD LVL	SW3	EQX2	Top	-0.001	1.324	1.741	6.3128	0.0875	0.0036
THIRD LVL	SW3	EQX2	Bottom	-0.001	1.324	1.741	6.3128	18.9823	14.3667
THIRD LVL	SW3	EQX3	Top	-0.0002213	2.356	1.76	12.6814	0.0876	0.0013
THIRD LVL	SW3	EQX3	Bottom	-0.0002213	2.356	1.76	12.6814	19.1829	25.5653
THIRD LVL	SW3	EQY1	Top	-0.003	23.178	-0.008	-11.8085	4.72E-05	0.0203
THIRD LVL	SW3	EQY1	Bottom	-0.003	23.178	-0.008	-11.8085	-0.0827	251.5025
THIRD LVL	SW3	EQY2	Top	-0.003	24.492	-0.011	-6.5318	0.0001	0.0177
THIRD LVL	SW3	EQY2	Bottom	-0.003	24.492	-0.011	-6.5318	-0.1237	265.7549
THIRD LVL	SW3	EQY3	Top	-0.004	21.864	-0.004	-17.0852	-5.586E-06	0.0228
THIRD LVL	SW3	EQY3	Bottom	-0.004	21.864	-0.004	-17.0852	-0.0416	237.2501
THIRD LVL	SW3	Wind-X	Top	-1.746E-05	0.248	0.398	-6.0374	0.0122	0.0001
THIRD LVL	SW3	Wind-X	Bottom	-1.746E-05	0.248	0.398	-6.0374	4.326	2.6875
THIRD LVL	SW3	Wind-Y	Top	-0.0001738	13.509	-0.099	1.6676	3.096E-05	0.0009
THIRD LVL	SW3	Wind-Y	Bottom	-0.0001738	13.509	-0.099	1.6676	-1.0775	146.579
SECOND LVL	WP1	Dead	Top	-39.608	18.759	-0.045	-0.3037	-1.482E-05	-143.9095
SECOND LVL	WP1	Dead	Bottom	-48.783	18.759	-0.045	-0.3037	-0.4532	44.2458
SECOND LVL	WP1	Extra Dead	Top	-7.778	-1.228	-0.006	1.992	-2.388E-06	-26.7619
SECOND LVL	WP1	Extra Dead	Bottom	-7.778	-1.228	-0.006	1.992	-0.0606	-39.0424
SECOND LVL	WP1	EQX1	Top	-0.001	-0.338	0.431	1.005	-3.53E-06	0.0039
SECOND LVL	WP1	EQX1	Bottom	-0.001	-0.338	0.431	1.005	4.3139	-3.3795
SECOND LVL	WP1	EQX2	Top	-0.0003843	-0.245	0.424	0.3096	-3.534E-06	0.0019
SECOND LVL	WP1	EQX2	Bottom	-0.0003843	-0.245	0.424	0.3096	4.241	-2.4483
SECOND LVL	WP1	EQX3	Top	-0.001	-0.432	0.439	1.7004	-3.527E-06	0.006
SECOND LVL	WP1	EQX3	Bottom	-0.001	-0.432	0.439	1.7004	4.3868	-4.3108
SECOND LVL	WP1	EQY1	Top	0.006	2.187	-0.014	-2.2233	1.19E-06	-0.0284
SECOND LVL	WP1	EQY1	Bottom	0.006	2.187	-0.014	-2.2233	-0.1397	21.837
SECOND LVL	WP1	EQY2	Top	0.005	2.002	-0.002	-1.1516	1.274E-06	-0.0253
SECOND LVL	WP1	EQY2	Bottom	0.005	2.002	-0.002	-1.1516	-0.019	19.995
SECOND LVL	WP1	EQY3	Top	0.007	2.371	-0.026	-3.295	1.107E-06	-0.0316
SECOND LVL	WP1	EQY3	Bottom	0.007	2.371	-0.026	-3.295	-0.2604	23.679
SECOND LVL	WP1	Wind-X	Top	-8.048E-05	-0.04	0.079	-0.5154	-4.578E-06	0.0004
SECOND LVL	WP1	Wind-X	Bottom	-8.048E-05	-0.04	0.079	-0.5154	0.7878	-0.3963
SECOND LVL	WP1	Wind-Y	Top	0.002	0.686	-0.009	-0.1276	2.23E-06	-0.0095
SECOND LVL	WP1	Wind-Y	Bottom	0.002	0.686	-0.009	-0.1276	-0.0877	6.8554
SECOND LVL	WP3	Dead	Top	-132.124	-9.76	-0.137	-1.6731	1.8979	-207.5826

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SECOND LVL	WP3	Dead	Bottom	-162.412	-9.76	-0.137	-1.6731	0.5321	-303.9979
SECOND LVL	WP3	Extra Dead	Top	-371.693	-41.86	0.252	6.4827	-1.6433	-389.4168
SECOND LVL	WP3	Extra Dead	Bottom	-371.693	-41.86	0.252	6.4827	0.8759	-808.0216
SECOND LVL	WP3	EQX1	Top	5.406E-06	-6.352	0.336	4.9585	12.4439	-192.5456
SECOND LVL	WP3	EQX1	Bottom	5.406E-06	-6.352	0.272	5.1007	15.4781	-256.0657
SECOND LVL	WP3	EQX2	Top	0	-3.862	0.362	2.5028	12.5844	-175.0534
SECOND LVL	WP3	EQX2	Bottom	0	-3.862	0.297	2.645	15.8732	-213.6691
SECOND LVL	WP3	EQX3	Top	7.975E-06	-8.842	0.311	7.4143	12.3035	-210.0377
SECOND LVL	WP3	EQX3	Bottom	7.975E-06	-8.842	0.246	7.5565	15.083	-298.4622
SECOND LVL	WP3	EQY1	Top	-3.637E-05	39.919	0.304	-8.4003	-1.009	443.425
SECOND LVL	WP3	EQY1	Bottom	-3.637E-05	39.971	0.304	-8.4003	2.0265	842.8824
SECOND LVL	WP3	EQY2	Top	-3.238E-05	35.951	0.253	-4.5381	-1.0961	398.9624
SECOND LVL	WP3	EQY2	Bottom	-3.238E-05	36.002	0.253	-4.5381	1.4325	758.7325
SECOND LVL	WP3	EQY3	Top	-4.036E-05	43.888	0.354	-12.2626	-0.9219	487.8877
SECOND LVL	WP3	EQY3	Bottom	-4.036E-05	43.94	0.354	-12.2626	2.6206	927.0322
SECOND LVL	WP3	Wind-X	Top	0	-0.92	0.63	0.6764	-5.0817	-18.8436
SECOND LVL	WP3	Wind-X	Bottom	0	-0.92	0.63	0.6764	1.2162	-28.0474
SECOND LVL	WP3	Wind-Y	Top	-1.214E-05	12.121	-0.014	-1.5217	1.5919	128.6831
SECOND LVL	WP3	Wind-Y	Bottom	-1.214E-05	12.121	-0.014	-1.5217	1.4482	249.8888
SECOND LVL	WP4	Dead	Top	-32.929	-4.211	-0.061	-0.4731	0.8004	5.0373
SECOND LVL	WP4	Dead	Bottom	-42.136	-4.211	-0.061	-0.4731	0.1941	-37.3789
SECOND LVL	WP4	Extra Dead	Top	-72.639	-8.54	0.015	2.0095	-0.1283	16.8817
SECOND LVL	WP4	Extra Dead	Bottom	-72.639	-8.54	0.015	2.0095	0.0168	-68.5147
SECOND LVL	WP4	EQX1	Top	0.004	-0.485	0.013	1.2629	3.6805	-7.8784
SECOND LVL	WP4	EQX1	Bottom	0.004	-0.485	0.013	1.2629	3.8093	-12.7257
SECOND LVL	WP4	EQX2	Top	0.002	-0.35	0.017	0.5398	3.708	-7.7665
SECOND LVL	WP4	EQX2	Bottom	0.002	-0.35	0.017	0.5398	3.8744	-11.264
SECOND LVL	WP4	EQX3	Top	0.005	-0.62	0.009	1.9861	3.653	-7.9903
SECOND LVL	WP4	EQX3	Bottom	0.005	-0.62	0.009	1.9861	3.7441	-14.1873
SECOND LVL	WP4	EQY1	Top	-0.025	2.039	0.083	-2.3028	-0.3744	14.2058
SECOND LVL	WP4	EQY1	Bottom	-0.025	2.039	0.083	-2.3028	0.4529	34.5921
SECOND LVL	WP4	EQY2	Top	-0.022	1.826	0.078	-1.1798	-0.4508	12.969
SECOND LVL	WP4	EQY2	Bottom	-0.022	1.826	0.078	-1.1798	0.3252	31.2255
SECOND LVL	WP4	EQY3	Top	-0.028	2.252	0.088	-3.4258	-0.2979	15.4427
SECOND LVL	WP4	EQY3	Bottom	-0.028	2.252	0.088	-3.4258	0.5806	37.9587
SECOND LVL	WP4	Wind-X	Top	0.0003418	-0.125	0.045	-0.5515	-0.0046	0.2266
SECOND LVL	WP4	Wind-X	Bottom	0.0003418	-0.125	0.045	-0.5515	0.4499	-1.0255
SECOND LVL	WP4	Wind-Y	Top	-0.008	0.585	0.035	-0.1108	-0.1931	4.252
SECOND LVL	WP4	Wind-Y	Bottom	-0.008	0.585	0.035	-0.1108	0.1598	10.1042
SECOND LVL	WP5	Dead	Top	-41.596	-24.254	-0.017	-0.4779	1.483E-05	158.2038
SECOND LVL	WP5	Dead	Bottom	-54.44	-24.254	-0.017	-0.4779	-0.1741	-84.9964
SECOND LVL	WP5	Extra Dead	Top	-8.168	-2.338	-0.104	4.2271	2.983E-06	29.5205
SECOND LVL	WP5	Extra Dead	Bottom	-8.168	-2.338	-0.104	4.2271	-1.0382	6.1369
SECOND LVL	WP5	EQX1	Top	-0.001	1.431	1.027	2.4626	-2.774E-06	-0.0053
SECOND LVL	WP5	EQX1	Bottom	-0.001	1.431	1.027	2.4626	10.2708	14.3083

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SECOND LVL	WP5	EQX2	Top	-0.001	1.323	1.033	0.8681	-2.638E-06	-0.0027
SECOND LVL	WP5	EQX2	Bottom	-0.001	1.323	1.033	0.8681	10.329	13.2248
SECOND LVL	WP5	EQX3	Top	-0.002	1.54	1.021	4.0571	-2.909E-06	-0.0079
SECOND LVL	WP5	EQX3	Bottom	-0.002	1.54	1.021	4.0571	10.2127	15.3919
SECOND LVL	WP5	EQY1	Top	-0.004	0.689	0.09	-5.5657	0	-0.0219
SECOND LVL	WP5	EQY1	Bottom	-0.004	0.689	0.09	-5.5657	0.902	6.8642
SECOND LVL	WP5	EQY2	Top	-0.005	0.935	0.08	-3.1095	0	-0.0259
SECOND LVL	WP5	EQY2	Bottom	-0.005	0.935	0.08	-3.1095	0.7972	9.3272
SECOND LVL	WP5	EQY3	Top	-0.004	0.442	0.101	-8.0219	0	-0.0178
SECOND LVL	WP5	EQY3	Bottom	-0.004	0.442	0.101	-8.0219	1.0068	4.4012
SECOND LVL	WP5	Wind-X	Top	-0.0001102	0.22	0.124	-0.623	2.041E-06	-0.0005
SECOND LVL	WP5	Wind-X	Bottom	-0.0001102	0.22	0.124	-0.623	1.2435	2.1956
SECOND LVL	WP5	Wind-Y	Top	-0.002	0.61	0.052	-0.6227	-1.45E-06	-0.0102
SECOND LVL	WP5	Wind-Y	Bottom	-0.002	0.61	0.052	-0.6227	0.5165	6.0884
SECOND LVL	WP6	Dead	Top	-34.325	-2.789	0.097	-1.079	1.925E-06	-73.9778
SECOND LVL	WP6	Dead	Bottom	-60.95	-2.789	0.097	-1.079	0.9736	-101.8719
SECOND LVL	WP6	Extra Dead	Top	-12.999	2.34	0.059	6.0291	5.776E-07	-15.3187
SECOND LVL	WP6	Extra Dead	Bottom	-12.999	2.34	0.059	6.0291	0.5852	8.0789
SECOND LVL	WP6	EQX1	Top	-7.416E-06	5.429	1.741	3.5302	-2.012E-06	-0.0003
SECOND LVL	WP6	EQX1	Bottom	-7.416E-06	5.429	1.318	3.5558	15.2246	54.2901
SECOND LVL	WP6	EQX2	Top	0	4.145	1.727	1.3389	-2.158E-06	-0.0001
SECOND LVL	WP6	EQX2	Bottom	0	4.145	1.305	1.3645	15.0916	41.4532
SECOND LVL	WP6	EQX3	Top	-1.124E-05	6.713	1.754	5.7216	-1.866E-06	-0.0004
SECOND LVL	WP6	EQX3	Bottom	-1.124E-05	6.713	1.331	5.7471	15.3575	67.1269
SECOND LVL	WP6	EQY1	Top	-3.167E-05	8.948	-0.124	-7.7414	0	-0.0012
SECOND LVL	WP6	EQY1	Bottom	-3.167E-05	9.286	-0.124	-7.7414	-1.2374	91.2252
SECOND LVL	WP6	EQY2	Top	-3.751E-05	11.387	-0.113	-4.4052	6.815E-07	-0.0014
SECOND LVL	WP6	EQY2	Bottom	-3.751E-05	11.725	-0.113	-4.4052	-1.1309	115.6134
SECOND LVL	WP6	EQY3	Top	-2.584E-05	6.509	-0.134	-11.0776	0	-0.0009
SECOND LVL	WP6	EQY3	Bottom	-2.584E-05	6.847	-0.134	-11.0776	-1.3438	66.837
SECOND LVL	WP6	Wind-X	Top	0	0.558	0.302	0.5442	-2.915E-06	-2.662E-05
SECOND LVL	WP6	Wind-X	Bottom	0	0.558	0.302	0.5442	3.0246	5.5847
SECOND LVL	WP6	Wind-Y	Top	-1.47E-05	5.489	-0.144	-1.6158	1.938E-06	-0.0005
SECOND LVL	WP6	Wind-Y	Bottom	-1.47E-05	5.489	-0.144	-1.6158	-1.4363	54.893
SECOND LVL	SW1	Dead	Top	-175.363	-34.422	0.268	-7.0031	-4.056	-202.779
SECOND LVL	SW1	Dead	Bottom	-220.779	-34.422	0.268	-7.0031	-1.3756	-546.9987
SECOND LVL	SW1	Extra Dead	Top	-190.43	-20.405	0.543	14.6873	-5.8934	-956.5103
SECOND LVL	SW1	Extra Dead	Bottom	-190.43	-20.405	0.543	14.6873	-0.4672	-1160.561
SECOND LVL	SW1	EQX1	Top	1.684E-05	-12.901	2.205	25.0536	23.9645	-209.0279
SECOND LVL	SW1	EQX1	Bottom	1.684E-05	-12.901	2.205	25.0536	46.0131	-338.0336
SECOND LVL	SW1	EQX2	Top	8.512E-06	-8.196	2.178	17.1859	23.8706	-191.219
SECOND LVL	SW1	EQX2	Bottom	8.512E-06	-8.196	2.178	17.1859	45.6484	-273.1793
SECOND LVL	SW1	EQX3	Top	2.518E-05	-17.605	2.232	32.9214	24.0584	-226.8368
SECOND LVL	SW1	EQX3	Bottom	2.518E-05	-17.605	2.232	32.9214	46.3778	-402.8878
SECOND LVL	SW1	EQY1	Top	-0.0001161	81.487	-0.655	-27.4428	5.3478	403.1098



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SECOND LVL	SW1	EQY1	Bottom	-0.0001161	81.487	-0.655	-27.4428	-1.2045	1217.976
SECOND LVL	SW1	EQY2	Top	-0.0001033	73.636	-0.666	-15.5671	5.9501	359.7029
SECOND LVL	SW1	EQY2	Bottom	-0.0001033	73.636	-0.666	-15.5671	-0.7075	1096.0598
SECOND LVL	SW1	EQY3	Top	-0.0001289	89.338	-0.645	-39.3186	4.7455	446.5168
SECOND LVL	SW1	EQY3	Bottom	-0.0001289	89.338	-0.645	-39.3186	-1.7016	1339.8921
SECOND LVL	SW1	Wind-X	Top	0	-1.369	0.435	8.5045	2.8608	-37.315
SECOND LVL	SW1	Wind-X	Bottom	0	-1.369	0.435	8.5045	7.214	-51.0089
SECOND LVL	SW1	Wind-Y	Top	-3.872E-05	25.058	-0.363	-7.7113	2.849	111.2684
SECOND LVL	SW1	Wind-Y	Bottom	-3.872E-05	25.058	-0.363	-7.7113	-0.7849	361.8456
SECOND LVL	SW2	Dead	Top	-303.633	12.535	0.092	-6.1694	-1.7886	-923.8525
SECOND LVL	SW2	Dead	Bottom	-344.433	12.535	0.092	-6.1694	-0.8683	-797.7014
SECOND LVL	SW2	Extra Dead	Top	-432.778	112.289	0.177	13.5381	-2.0109	-3040.1706
SECOND LVL	SW2	Extra Dead	Bottom	-432.778	112.289	0.177	13.5381	-0.2406	-1917.2798
SECOND LVL	SW2	EQX1	Top	0.262	-15.787	2.196	19.3954	13.6607	-121.939
SECOND LVL	SW2	EQX1	Bottom	0.262	-15.787	2.196	19.3954	35.6194	-279.8097
SECOND LVL	SW2	EQX2	Top	0.262	-9.657	2.213	13.7154	13.4391	-107.4961
SECOND LVL	SW2	EQX2	Bottom	0.262	-9.657	2.213	13.7154	35.5719	-204.0647
SECOND LVL	SW2	EQX3	Top	0.261	-21.917	2.178	25.0754	13.8823	-136.3819
SECOND LVL	SW2	EQX3	Bottom	0.261	-21.917	2.178	25.0754	35.6669	-355.5546
SECOND LVL	SW2	EQY1	Top	0.002	125.892	-0.144	-17.4436	1.4792	470.632
SECOND LVL	SW2	EQY1	Bottom	0.002	125.892	-0.144	-17.4436	0.0389	1729.5502
SECOND LVL	SW2	EQY2	Top	0.002	116.031	-0.156	-8.6721	1.7505	447.6783
SECOND LVL	SW2	EQY2	Bottom	0.002	116.031	-0.156	-8.6721	0.1871	1607.9863
SECOND LVL	SW2	EQY3	Top	0.003	135.753	-0.132	-26.2151	1.2078	493.5857
SECOND LVL	SW2	EQY3	Bottom	0.003	135.753	-0.132	-26.2151	-0.1093	1851.114
SECOND LVL	SW2	Wind-X	Top	0.037	-1.833	0.03	-1.0925	4.0332	-6.4301
SECOND LVL	SW2	Wind-X	Bottom	0.037	-1.833	0.03	-1.0925	4.3354	-24.7619
SECOND LVL	SW2	Wind-Y	Top	0.0001592	41.763	0.081	-0.5905	-0.2796	170.6137
SECOND LVL	SW2	Wind-Y	Bottom	0.0001592	41.763	0.081	-0.5905	0.5324	588.2395
SECOND LVL	SW4	Dead	Top	-269.525	5.501	-0.204	-1.8953	3.0978	-822.6293
SECOND LVL	SW4	Dead	Bottom	-313.491	5.501	-0.204	-1.8953	1.0614	-764.9495
SECOND LVL	SW4	Extra Dead	Top	-55.245	-16.04	0.267	20.1599	-1.775	-83.6828
SECOND LVL	SW4	Extra Dead	Bottom	-55.245	-16.04	0.267	20.1599	0.8937	-244.0783
SECOND LVL	SW4	EQX1	Top	-0.258	5.687	0.212	16.8654	34.3065	473.5167
SECOND LVL	SW4	EQX1	Bottom	-0.258	5.687	0.212	16.8654	36.4243	530.391
SECOND LVL	SW4	EQX2	Top	-0.258	0.793	0.119	8.7566	35.0535	436.548
SECOND LVL	SW4	EQX2	Bottom	-0.258	0.793	0.119	8.7566	36.2422	444.4737
SECOND LVL	SW4	EQX3	Top	-0.258	10.582	0.305	24.9741	33.5596	510.4855
SECOND LVL	SW4	EQX3	Bottom	-0.258	10.582	0.305	24.9741	36.6064	616.3082
SECOND LVL	SW4	EQY1	Top	-0.003	69.839	-0.313	-27.2771	1.9825	436.8642
SECOND LVL	SW4	EQY1	Bottom	-0.003	69.839	-0.313	-27.2771	-1.1506	1135.2513
SECOND LVL	SW4	EQY2	Top	-0.004	77.475	-0.164	-15.0309	0.7303	517.4863
SECOND LVL	SW4	EQY2	Bottom	-0.004	77.475	-0.164	-15.0309	-0.9071	1292.2369
SECOND LVL	SW4	EQY3	Top	-0.003	62.202	-0.463	-39.5234	3.2347	356.2421
SECOND LVL	SW4	EQY3	Bottom	-0.003	62.202	-0.463	-39.5234	-1.3942	978.2658

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SECOND LVL	SW4	Wind-X	Top	-0.036	1.04	-0.245	0.2497	6.9948	55.3569
SECOND LVL	SW4	Wind-X	Bottom	-0.036	1.04	-0.245	0.2497	4.5484	65.7584
SECOND LVL	SW4	Wind-Y	Top	-0.002	27.99	0.017	-2.4623	-0.6113	300.0763
SECOND LVL	SW4	Wind-Y	Bottom	-0.002	27.99	0.017	-2.4623	-0.4375	579.9778
SECOND LVL	LW1	Dead	Top	-140.403	-5.76	1.949	-1.525	-21.902	134.584
SECOND LVL	LW1	Dead	Bottom	-188.28	-5.76	1.949	-1.0435	-2.4139	115.9505
SECOND LVL	LW1	Extra Dead	Top	-14.941	-1.594	0.387	18.3958	-14.5902	97.7643
SECOND LVL	LW1	Extra Dead	Bottom	-14.941	-1.594	0.387	18.4913	-10.7234	85.5127
SECOND LVL	LW1	EQX1	Top	490.611	151.947	0.834	10.457	-8.0576	-8176.2834
SECOND LVL	LW1	EQX1	Bottom	490.611	151.947	0.834	10.663	0.2833	-6778.0332
SECOND LVL	LW1	EQX2	Top	490.783	151.812	0.894	5.3079	-8.2961	-8163.5383
SECOND LVL	LW1	EQX2	Bottom	490.783	151.812	0.894	5.5289	0.6468	-6766.6857
SECOND LVL	LW1	EQX3	Top	490.44	152.083	0.774	15.606	-7.8191	-8189.0285
SECOND LVL	LW1	EQX3	Bottom	490.44	152.083	0.774	15.7972	-0.0802	-6789.3807
SECOND LVL	LW1	EQY1	Top	-2.303	1.308	-1.453	-14.3296	15.3048	-91.1945
SECOND LVL	LW1	EQY1	Bottom	-2.303	1.308	-1.453	-14.6885	0.7781	-77.545
SECOND LVL	LW1	EQY2	Top	-2.701	1.742	-1.615	-6.4887	16.3313	-119.6259
SECOND LVL	LW1	EQY2	Bottom	-2.701	1.742	-1.615	-6.8878	0.1769	-101.5428
SECOND LVL	LW1	EQY3	Top	-1.904	0.875	-1.29	-22.1705	14.2784	-62.7632
SECOND LVL	LW1	EQY3	Bottom	-1.904	0.875	-1.29	-22.4892	1.3793	-53.5473
SECOND LVL	LW1	Wind-X	Top	68.458	18.645	0.461	1.7484	-5.017	-1155.4
SECOND LVL	LW1	Wind-X	Bottom	68.458	18.645	0.461	1.8625	-0.4029	-985.8644
SECOND LVL	LW1	Wind-Y	Top	-1.78	0.779	-1.087	-3.5969	11.4753	-63.3627
SECOND LVL	LW1	Wind-Y	Bottom	-1.78	0.779	-1.087	-3.8654	0.6076	-55.1366
SECOND LVL	LW2	Dead	Top	-149.544	6.218	3.369	0.0068	-32.9196	-17.7673
SECOND LVL	LW2	Dead	Bottom	-197.421	6.218	3.369	-0.5557	0.7711	16.561
SECOND LVL	LW2	Extra Dead	Top	-17.701	3.047	1.241	14.7949	-16.3702	-48.964
SECOND LVL	LW2	Extra Dead	Bottom	-17.701	3.047	1.241	14.5878	-3.9648	-21.4493
SECOND LVL	LW2	EQX1	Top	-490.613	153.003	0.665	8.6941	-4.4665	-8309.8376
SECOND LVL	LW2	EQX1	Bottom	-490.613	153.003	0.665	8.583	2.1884	-6861.7141
SECOND LVL	LW2	EQX2	Top	-490.784	153.27	0.736	3.2213	-5.5782	-8312.6463
SECOND LVL	LW2	EQX2	Bottom	-490.784	153.27	0.736	3.0984	1.7836	-6861.8845
SECOND LVL	LW2	EQX3	Top	-490.441	152.736	0.595	14.1669	-3.3548	-8307.0289
SECOND LVL	LW2	EQX3	Bottom	-490.441	152.736	0.595	14.0676	2.5931	-6861.5436
SECOND LVL	LW2	EQY1	Top	2.308	-1.504	-0.4	-16.213	8.3121	9.4711
SECOND LVL	LW2	EQY1	Bottom	2.308	-1.504	-0.4	-16.1462	4.3121	-5.1867
SECOND LVL	LW2	EQY2	Top	2.707	-1.972	-0.541	-7.7156	10.2964	15.6133
SECOND LVL	LW2	EQY2	Bottom	2.707	-1.972	-0.541	-7.6252	4.883	-3.6567
SECOND LVL	LW2	EQY3	Top	1.909	-1.036	-0.259	-24.7104	6.3278	3.329
SECOND LVL	LW2	EQY3	Bottom	1.909	-1.036	-0.259	-24.6672	3.7412	-6.7166
SECOND LVL	LW2	Wind-X	Top	-68.459	18.606	-0.198	0.6008	2.6499	-1171.0549
SECOND LVL	LW2	Wind-X	Bottom	-68.459	18.606	-0.198	0.6339	0.6663	-996.4276
SECOND LVL	LW2	Wind-Y	Top	1.782	-0.584	-0.629	-1.1325	6.7864	-0.6937
SECOND LVL	LW2	Wind-Y	Bottom	1.782	-0.584	-0.629	-1.0275	0.4953	-6.2371
SECOND LVL	LW3	Dead	Top	-179.8	-20.311	3.723	-5.4764	-35.7983	276.5995

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SECOND LVL	LW3	Dead	Bottom	-227.604	-20.311	3.723	-4.5301	1.4333	123.5805
SECOND LVL	LW3	Extra Dead	Top	-17.857	-0.011	0.854	13.4316	-12.0588	-28.2869
SECOND LVL	LW3	Extra Dead	Bottom	-17.857	-0.011	0.854	13.6487	-3.5195	-23.8596
SECOND LVL	LW3	EQX1	Top	483.335	149.74	-1.056	7.1818	9.0719	-8258.0055
SECOND LVL	LW3	EQX1	Bottom	483.335	149.74	-1.056	6.9133	-1.4918	-6883.4564
SECOND LVL	LW3	EQX2	Top	483.086	149.746	-1.013	2.0338	8.9172	-8260.816
SECOND LVL	LW3	EQX2	Bottom	483.086	149.746	-1.013	1.7764	-1.2083	-6886.1425
SECOND LVL	LW3	EQX3	Top	483.584	149.734	-1.1	12.3299	9.2265	-8255.1951
SECOND LVL	LW3	EQX3	Bottom	483.584	149.734	-1.1	12.0502	-1.7752	-6880.7702
SECOND LVL	LW3	EQY1	Top	2.168	0.246	-0.333	-19.6014	7.3008	22.3464
SECOND LVL	LW3	EQY1	Bottom	2.168	0.246	-0.333	-19.6861	3.9667	24.2547
SECOND LVL	LW3	EQY2	Top	2.688	0.338	-0.483	-11.826	8.4449	27.7265
SECOND LVL	LW3	EQY2	Bottom	2.688	0.338	-0.483	-11.9488	3.616	30.4211
SECOND LVL	LW3	EQY3	Top	1.648	0.154	-0.184	-27.3768	6.1566	16.9662
SECOND LVL	LW3	EQY3	Bottom	1.648	0.154	-0.184	-27.4235	4.3175	18.0883
SECOND LVL	LW3	Wind-X	Top	67.398	18.127	0.262	0.9063	-2.9452	-1163.5216
SECOND LVL	LW3	Wind-X	Bottom	67.398	18.127	0.262	0.973	-0.3206	-999.3813
SECOND LVL	LW3	Wind-Y	Top	1.745	0.679	-0.903	-5.5061	11.1883	9.001
SECOND LVL	LW3	Wind-Y	Bottom	1.745	0.679	-0.903	-5.7356	2.1572	15.3512
SECOND LVL	LW4	Dead	Top	-171.477	15.901	1.993	-6.2136	-22.3283	-370.3364
SECOND LVL	LW4	Dead	Bottom	-219.354	15.901	1.993	-6.5463	-2.4	-242.8394
SECOND LVL	LW4	Extra Dead	Top	-14.525	0.202	0.335	13.4142	-4.8606	-39.5262
SECOND LVL	LW4	Extra Dead	Bottom	-14.525	0.202	0.335	13.3582	-1.5085	-39.9308
SECOND LVL	LW4	EQX1	Top	-483.33	159.245	-1.143	11.8587	13.1472	-8442.579
SECOND LVL	LW4	EQX1	Bottom	-483.33	159.245	-1.143	12.0495	1.7156	-6930.8147
SECOND LVL	LW4	EQX2	Top	-483.081	159.108	-1.061	6.2707	11.9756	-8446.4884
SECOND LVL	LW4	EQX2	Bottom	-483.081	159.108	-1.061	6.4477	1.369	-6936.057
SECOND LVL	LW4	EQX3	Top	-483.579	159.383	-1.226	17.4467	14.3187	-8438.6697
SECOND LVL	LW4	EQX3	Bottom	-483.579	159.383	-1.226	17.6514	2.0621	-6925.5725
SECOND LVL	LW4	EQY1	Top	-2.157	-0.175	0.014	-17.175	2.0641	70.9036
SECOND LVL	LW4	EQY1	Bottom	-2.157	-0.175	0.014	-17.1774	2.205	68.7918
SECOND LVL	LW4	EQY2	Top	-2.678	0.188	-0.164	-8.531	4.4395	77.9669
SECOND LVL	LW4	EQY2	Bottom	-2.678	0.188	-0.164	-8.5036	2.8007	79.397
SECOND LVL	LW4	EQY3	Top	-1.637	-0.538	0.192	-25.8191	-0.3114	63.8403
SECOND LVL	LW4	EQY3	Bottom	-1.637	-0.538	0.192	-25.8511	1.6094	58.1867
SECOND LVL	LW4	Wind-X	Top	-67.398	19.301	-0.584	1.5318	5.9402	-1188.0341
SECOND LVL	LW4	Wind-X	Bottom	-67.398	19.301	-0.584	1.6293	0.0985	-1006.2795
SECOND LVL	LW4	Wind-Y	Top	-1.742	0.301	-0.64	-1.0697	6.5074	45.7006
SECOND LVL	LW4	Wind-Y	Bottom	-1.742	0.301	-0.64	-0.9629	0.1081	48.4202
SECOND LVL	SW5	Dead	Top	-104.471	-2.403	0.285	-3.8858	-1.836E-06	-147.0887
SECOND LVL	SW5	Dead	Bottom	-153.317	-2.403	0.285	-4.0087	2.8508	-229.7852
SECOND LVL	SW5	Extra Dead	Top	-21.202	5.182	-0.009	28.276	-6.3E-07	-33.2183
SECOND LVL	SW5	Extra Dead	Bottom	-21.202	5.182	-0.009	28.2798	-0.0875	9.4575
SECOND LVL	SW5	EQX1	Top	1.029E-05	24.976	7.303	24.2978	1.494E-06	-0.0002
SECOND LVL	SW5	EQX1	Bottom	1.029E-05	24.976	6.876	24.7905	70.9732	249.7556

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SECOND LVL	SW5	EQX2	Top	0	17.097	7.34	13.9739	1.636E-06	-0.0001
SECOND LVL	SW5	EQX2	Bottom	0	17.097	6.913	14.4507	71.3414	170.968
SECOND LVL	SW5	EQX3	Top	1.563E-05	32.854	7.267	34.6217	1.353E-06	-0.0003
SECOND LVL	SW5	EQX3	Bottom	1.563E-05	32.854	6.84	35.1302	70.605	328.5431
SECOND LVL	SW5	EQY1	Top	4.417E-05	62.004	0.042	-37.6607	0	-0.0008
SECOND LVL	SW5	EQY1	Bottom	4.417E-05	62.345	0.042	-37.679	0.4235	621.6837
SECOND LVL	SW5	EQY2	Top	5.232E-05	75.052	-0.017	-22.2905	0	-0.001
SECOND LVL	SW5	EQY2	Bottom	5.232E-05	75.394	-0.017	-22.2832	-0.1714	752.1709
SECOND LVL	SW5	EQY3	Top	3.602E-05	48.955	0.102	-53.0309	0	-0.0007
SECOND LVL	SW5	EQY3	Bottom	3.602E-05	49.296	0.102	-53.0748	1.0185	491.1964
SECOND LVL	SW5	Wind-X	Top	0	2.583	0.908	8.9618	2.203E-06	-1.925E-05
SECOND LVL	SW5	Wind-X	Bottom	0	2.583	0.908	8.5702	9.0824	25.8315
SECOND LVL	SW5	Wind-Y	Top	2.051E-05	30.691	0.062	-12.0822	-1.43E-06	-0.0004
SECOND LVL	SW5	Wind-Y	Bottom	2.051E-05	30.691	0.062	-12.1089	0.6175	306.9121
SECOND LVL	SW3	Dead	Top	-295.838	26.242	-0.037	-2.9255	0.3376	-957.6637
SECOND LVL	SW3	Dead	Bottom	-330.85	26.242	-0.037	-2.9255	-0.0357	-689.5298
SECOND LVL	SW3	Extra Dead	Top	-61.873	-23.587	0.021	12.9667	-0.0525	-230.4132
SECOND LVL	SW3	Extra Dead	Bottom	-61.873	-23.587	0.021	12.9667	0.1574	-466.2837
SECOND LVL	SW3	EQX1	Top	-0.002	0.941	1.468	20.2708	19.2582	19.9635
SECOND LVL	SW3	EQX1	Bottom	-0.002	0.941	1.468	20.2708	33.9376	29.3762
SECOND LVL	SW3	EQX2	Top	-0.002	0.938	1.481	15.1494	19.1579	14.3631
SECOND LVL	SW3	EQX2	Bottom	-0.002	0.938	1.481	15.1494	33.9709	23.7459
SECOND LVL	SW3	EQX3	Top	-0.001	0.944	1.455	25.3921	19.3585	25.564
SECOND LVL	SW3	EQX3	Bottom	-0.001	0.944	1.455	25.3921	33.9043	35.0065
SECOND LVL	SW3	EQY1	Top	-0.015	54.073	-0.004	-18.535	-0.0826	251.4817
SECOND LVL	SW3	EQY1	Bottom	-0.015	54.073	-0.004	-18.535	-0.1236	792.2095
SECOND LVL	SW3	EQY2	Top	-0.014	54.183	-0.002	-10.7039	-0.1235	265.7367
SECOND LVL	SW3	EQY2	Bottom	-0.014	54.183	-0.002	-10.7039	-0.1438	807.5626
SECOND LVL	SW3	EQY3	Top	-0.016	53.963	-0.006	-26.3661	-0.0416	237.2267
SECOND LVL	SW3	EQY3	Bottom	-0.016	53.963	-0.006	-26.3661	-0.1033	776.8565
SECOND LVL	SW3	Wind-X	Top	-0.0001664	0.247	-0.008	-0.6489	4.3505	2.6874
SECOND LVL	SW3	Wind-X	Bottom	-0.0001664	0.247	-0.008	-0.6489	4.2728	5.1532
SECOND LVL	SW3	Wind-Y	Top	-0.004	20.044	0.127	-1.2753	-1.0775	146.5779
SECOND LVL	SW3	Wind-Y	Bottom	-0.004	20.044	0.127	-1.2753	0.1915	347.0167
FIRST LVL	WP1	Dead	Top	-88.39	12.713	0.058	-0.4785	-0.4532	-99.6637
FIRST LVL	WP1	Dead	Bottom	-97.565	12.713	0.058	-0.4785	0.1258	28.0275
FIRST LVL	WP1	Extra Dead	Top	-7.78	-1.227	0.07	1.7085	-0.0606	-39.0337
FIRST LVL	WP1	Extra Dead	Bottom	-7.78	-1.227	0.07	1.7085	0.6356	-51.3026
FIRST LVL	WP1	EQX1	Top	-0.002	-0.879	-0.042	1.2156	4.3139	-3.3756
FIRST LVL	WP1	EQX1	Bottom	-0.002	-0.879	-0.042	1.2156	3.8897	-12.167
FIRST LVL	WP1	EQX2	Top	-0.001	-0.68	-0.045	0.4789	4.241	-2.4464
FIRST LVL	WP1	EQX2	Bottom	-0.001	-0.68	-0.045	0.4789	3.7909	-9.2417
FIRST LVL	WP1	EQX3	Top	-0.002	-1.079	-0.04	1.9523	4.3868	-4.3048
FIRST LVL	WP1	EQX3	Bottom	-0.002	-1.079	-0.04	1.9523	3.9885	-15.0922
FIRST LVL	WP1	EQY1	Top	0.012	3.129	-0.015	-2.3633	-0.1397	21.8087

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
FIRST LVL	WP1	EQY1	Bottom	0.012	3.129	-0.015	-2.3633	-0.2868	53.0991
FIRST LVL	WP1	EQY2	Top	0.01	2.797	-0.01	-1.2458	-0.019	19.9698
FIRST LVL	WP1	EQY2	Bottom	0.01	2.797	-0.01	-1.2458	-0.1228	47.9393
FIRST LVL	WP1	EQY3	Top	0.013	3.461	-0.019	-3.4807	-0.2604	23.6476
FIRST LVL	WP1	EQY3	Bottom	0.013	3.461	-0.019	-3.4807	-0.4509	58.2589
FIRST LVL	WP1	Wind-X	Top	-0.0001611	-0.105	-0.02	-0.0522	0.7878	-0.3959
FIRST LVL	WP1	Wind-X	Bottom	-0.0001611	-0.105	-0.02	-0.0522	0.5899	-1.4479
FIRST LVL	WP1	Wind-Y	Top	0.004	0.925	0.003	-0.447	-0.0877	6.8459
FIRST LVL	WP1	Wind-Y	Bottom	0.004	0.925	0.003	-0.447	-0.055	16.0961
FIRST LVL	WP3	Dead	Top	-210.86	-6.97	-0.022	-1.5336	0.5321	-283.5416
FIRST LVL	WP3	Dead	Bottom	-243.329	-6.97	-0.022	-1.5336	0.3113	-353.2366
FIRST LVL	WP3	Extra Dead	Top	-457.253	-37.942	-0.202	7.1541	0.8758	-754.3739
FIRST LVL	WP3	Extra Dead	Bottom	-457.253	-37.942	-0.202	7.1541	-1.1426	-1133.7921
FIRST LVL	WP3	EQX1	Top	8.019E-06	-8.173	-0.307	5.3597	15.4781	-256.0652
FIRST LVL	WP3	EQX1	Bottom	8.019E-06	-8.173	-0.621	4.549	11.3335	-337.7905
FIRST LVL	WP3	EQX2	Top	0	-3.215	-0.315	2.5817	15.8732	-213.6689
FIRST LVL	WP3	EQX2	Bottom	0	-3.215	-0.629	1.7709	11.6503	-245.8157
FIRST LVL	WP3	EQX3	Top	1.189E-05	-13.13	-0.299	8.1378	15.083	-298.4616
FIRST LVL	WP3	EQX3	Bottom	1.189E-05	-13.13	-0.614	7.3271	11.0167	-429.7652
FIRST LVL	WP3	EQY1	Top	-5.453E-05	70.618	-0.069	-9.46	2.0265	842.8794
FIRST LVL	WP3	EQY1	Bottom	-5.453E-05	70.869	-0.069	-9.46	1.332	1549.9167
FIRST LVL	WP3	EQY2	Top	-4.854E-05	63.265	-0.059	-5.2577	1.4325	758.7299
FIRST LVL	WP3	EQY2	Bottom	-4.854E-05	63.516	-0.059	-5.2577	0.8386	1392.2383
FIRST LVL	WP3	EQY3	Top	-6.052E-05	77.971	-0.08	-13.6623	2.6206	927.029
FIRST LVL	WP3	EQY3	Bottom	-6.052E-05	78.222	-0.08	-13.6623	1.8254	1707.5951
FIRST LVL	WP3	Wind-X	Top	0	-1.065	0.028	0.4409	1.2162	-28.0473
FIRST LVL	WP3	Wind-X	Bottom	0	-1.065	0.028	0.4409	1.4941	-38.6963
FIRST LVL	WP3	Wind-Y	Top	-1.82E-05	21.83	-0.063	-1.7945	1.4482	249.8878
FIRST LVL	WP3	Wind-Y	Bottom	-1.82E-05	21.83	-0.063	-1.7945	0.8133	468.1837
FIRST LVL	WP4	Dead	Top	-53.492	-3.758	-0.026	-0.4844	0.1941	-3.7163
FIRST LVL	WP4	Dead	Bottom	-62.698	-3.758	-0.026	-0.4844	-0.0618	-41.6009
FIRST LVL	WP4	Extra Dead	Top	-89.354	-6.072	-0.063	1.8175	0.0167	-24.7519
FIRST LVL	WP4	Extra Dead	Bottom	-89.354	-6.072	-0.063	1.8175	-0.6114	-85.4683
FIRST LVL	WP4	EQX1	Top	0.005	-0.21	-0.101	1.325	3.8093	-12.7176
FIRST LVL	WP4	EQX1	Bottom	0.005	-0.21	-0.101	1.325	2.7992	-14.8175
FIRST LVL	WP4	EQX2	Top	0.003	-0.011	-0.1	0.5447	3.8744	-11.2601
FIRST LVL	WP4	EQX2	Bottom	0.003	-0.011	-0.1	0.5447	2.8709	-11.3702
FIRST LVL	WP4	EQX3	Top	0.008	-0.409	-0.102	2.1054	3.7441	-14.1751
FIRST LVL	WP4	EQX3	Bottom	0.008	-0.409	-0.102	2.1054	2.7275	-18.2648
FIRST LVL	WP4	EQY1	Top	-0.038	2.706	-0.022	-2.4274	0.4529	34.5346
FIRST LVL	WP4	EQY1	Bottom	-0.038	2.706	-0.022	-2.4274	0.2303	61.5955
FIRST LVL	WP4	EQY2	Top	-0.033	2.428	-0.021	-1.2465	0.3252	31.1743
FIRST LVL	WP4	EQY2	Bottom	-0.033	2.428	-0.021	-1.2465	0.1134	55.4501
FIRST LVL	WP4	EQY3	Top	-0.042	2.985	-0.023	-3.6083	0.5806	37.8949
FIRST LVL	WP4	EQY3	Bottom	-0.042	2.985	-0.023	-3.6083	0.3471	67.741

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
FIRST LVL	WP4	Wind-X	Top	0.001	-0.065	5.018E-05	-0.0441	0.4499	-1.0247
FIRST LVL	WP4	Wind-X	Bottom	0.001	-0.065	5.018E-05	-0.0441	0.4504	-1.677
FIRST LVL	WP4	Wind-Y	Top	-0.013	0.823	-0.01	-0.4675	0.1598	10.085
FIRST LVL	WP4	Wind-Y	Bottom	-0.013	0.823	-0.01	-0.4675	0.06	18.3118
FIRST LVL	WP5	Dead	Top	-96.036	-18.675	-0.01	-1.1999	-0.1741	73.207
FIRST LVL	WP5	Dead	Bottom	-108.88	-18.675	-0.01	-1.1999	-0.2742	-114.2027
FIRST LVL	WP5	Extra Dead	Top	-8.168	-0.312	-0.003	3.9407	-1.0382	6.1372
FIRST LVL	WP5	Extra Dead	Bottom	-8.168	-0.312	-0.003	3.9407	-1.072	3.0126
FIRST LVL	WP5	EQX1	Top	-0.002	0.596	-0.409	3.256	10.2708	14.3032
FIRST LVL	WP5	EQX1	Bottom	-0.002	0.596	-0.409	3.256	6.1835	20.2634
FIRST LVL	WP5	EQX2	Top	-0.001	0.237	-0.396	1.4844	10.329	13.2223
FIRST LVL	WP5	EQX2	Bottom	-0.001	0.237	-0.396	1.4844	6.3658	15.5894
FIRST LVL	WP5	EQX3	Top	-0.003	0.955	-0.421	5.0277	10.2127	15.3841
FIRST LVL	WP5	EQX3	Bottom	-0.003	0.955	-0.421	5.0277	6.0013	24.9373
FIRST LVL	WP5	EQY1	Top	-0.009	2.872	-0.017	-5.7098	0.902	6.8424
FIRST LVL	WP5	EQY1	Bottom	-0.009	2.872	-0.017	-5.7098	0.7348	35.5629
FIRST LVL	WP5	EQY2	Top	-0.011	3.44	-0.034	-3.0199	0.7972	9.3014
FIRST LVL	WP5	EQY2	Bottom	-0.011	3.44	-0.034	-3.0199	0.453	43.6965
FIRST LVL	WP5	EQY3	Top	-0.007	2.305	0.001	-8.3996	1.0068	4.3834
FIRST LVL	WP5	EQY3	Bottom	-0.007	2.305	0.001	-8.3996	1.0165	27.4292
FIRST LVL	WP5	Wind-X	Top	-0.0002153	0.039	-0.033	-0.0495	1.2436	2.1951
FIRST LVL	WP5	Wind-X	Bottom	-0.0002153	0.039	-0.033	-0.0495	0.9153	2.582
FIRST LVL	WP5	Wind-Y	Top	-0.004	1.222	-0.016	-1.0719	0.5165	6.0783
FIRST LVL	WP5	Wind-Y	Bottom	-0.004	1.222	-0.016	-1.0719	0.3592	18.3018
FIRST LVL	WP6	Dead	Top	-95.274	-2.475	-0.186	-1.3892	0.9736	-175.8497
FIRST LVL	WP6	Dead	Bottom	-121.899	-2.475	-0.186	-1.3892	-0.8839	-200.6024
FIRST LVL	WP6	Extra Dead	Top	-18.928	2.894	0.048	5.6244	0.5852	1.092
FIRST LVL	WP6	Extra Dead	Bottom	-18.928	2.894	0.048	5.6244	1.0611	30.034
FIRST LVL	WP6	EQX1	Top	-1.483E-05	10.45	-0.105	4.581	15.2246	54.2898
FIRST LVL	WP6	EQX1	Bottom	-1.483E-05	10.45	-0.466	4.6486	12.3699	158.7905
FIRST LVL	WP6	EQX2	Top	-7.153E-06	6.971	-0.135	2.3795	15.0916	41.4531
FIRST LVL	WP6	EQX2	Bottom	-7.153E-06	6.971	-0.495	2.4472	11.9417	111.1596
FIRST LVL	WP6	EQX3	Top	-2.252E-05	13.929	-0.076	6.7825	15.3575	67.1265
FIRST LVL	WP6	EQX3	Bottom	-2.252E-05	13.929	-0.436	6.8501	12.7981	206.4214
FIRST LVL	WP6	EQY1	Top	-6.357E-05	26.831	-0.104	-7.471	-1.2374	91.2241
FIRST LVL	WP6	EQY1	Bottom	-6.357E-05	27.119	-0.104	-7.471	-2.2758	360.9753
FIRST LVL	WP6	EQY2	Top	-7.528E-05	32.452	-0.053	-4.1206	-1.1309	115.6121
FIRST LVL	WP6	EQY2	Bottom	-7.528E-05	32.74	-0.053	-4.1206	-1.6577	441.5741
FIRST LVL	WP6	EQY3	Top	-5.186E-05	21.21	-0.155	-10.8215	-1.3439	66.8361
FIRST LVL	WP6	EQY3	Bottom	-5.186E-05	21.498	-0.155	-10.8215	-2.8938	280.3765
FIRST LVL	WP6	Wind-X	Top	0	1.165	-0.106	0.5437	3.0246	5.5847
FIRST LVL	WP6	Wind-X	Bottom	0	1.165	-0.106	0.5437	1.9665	17.2391
FIRST LVL	WP6	Wind-Y	Top	-2.95E-05	12.121	-0.039	-1.4113	-1.4363	54.8925
FIRST LVL	WP6	Wind-Y	Bottom	-2.95E-05	12.121	-0.039	-1.4113	-1.8268	176.1071
FIRST LVL	SW1	Dead	Top	-323.013	-28.202	0.203	-2.6011	-1.3756	-334.9539

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
FIRST LVL	SW1	Dead	Bottom	-368.43	-28.202	0.203	-2.6011	0.6503	-616.9733
FIRST LVL	SW1	Extra Dead	Top	-231.274	-15.908	0.083	19.0683	-0.4672	-1425.4419
FIRST LVL	SW1	Extra Dead	Bottom	-231.274	-15.908	0.083	19.0683	0.3616	-1584.5259
FIRST LVL	SW1	EQX1	Top	2.425E-05	-15.794	-1.527	12.967	46.0131	-338.0334
FIRST LVL	SW1	EQX1	Bottom	2.425E-05	-15.794	-1.527	12.967	30.7403	-495.9728
FIRST LVL	SW1	EQX2	Top	1.21E-05	-8.174	-1.503	6.6993	45.6484	-273.1792
FIRST LVL	SW1	EQX2	Bottom	1.21E-05	-8.174	-1.503	6.6993	30.6232	-354.9158
FIRST LVL	SW1	EQX3	Top	3.639E-05	-23.414	-1.552	19.2347	46.3778	-402.8876
FIRST LVL	SW1	EQX3	Bottom	3.639E-05	-23.414	-1.552	19.2347	30.8574	-637.0299
FIRST LVL	SW1	EQY1	Top	-0.0001689	112.638	0.203	-22.3758	-1.2045	1217.9749
FIRST LVL	SW1	EQY1	Bottom	-0.0001689	112.638	0.203	-22.3758	0.8264	2344.3577
FIRST LVL	SW1	EQY2	Top	-0.0001503	100.945	0.172	-12.7213	-0.7075	1096.0588
FIRST LVL	SW1	EQY2	Bottom	-0.0001503	100.945	0.172	-12.7213	1.0165	2105.507
FIRST LVL	SW1	EQY3	Top	-0.0001875	124.332	0.234	-32.0304	-1.7016	1339.8909
FIRST LVL	SW1	EQY3	Bottom	-0.0001875	124.332	0.234	-32.0304	0.6363	2583.2083
FIRST LVL	SW1	Wind-X	Top	0	-1.227	-0.261	1.9466	7.214	-51.0088
FIRST LVL	SW1	Wind-X	Bottom	0	-1.227	-0.261	1.9466	4.6014	-63.2776
FIRST LVL	SW1	Wind-Y	Top	-5.637E-05	34.868	0.098	-3.5283	-0.7849	361.8452
FIRST LVL	SW1	Wind-Y	Bottom	-5.637E-05	34.868	0.098	-3.5283	0.1943	710.5223
FIRST LVL	SW2	Dead	Top	-527.973	10.894	0.126	-2.2797	-0.7844	-881.3853
FIRST LVL	SW2	Dead	Bottom	-568.773	10.894	0.126	-2.2797	0.4712	-771.6496
FIRST LVL	SW2	Extra Dead	Top	-524.125	91.288	0.013	15.185	-0.163	-2865.0395
FIRST LVL	SW2	Extra Dead	Bottom	-524.125	91.288	0.013	15.185	-0.0351	-1952.1552
FIRST LVL	SW2	EQX1	Top	0.448	-15.948	-1.532	8.866	35.7146	-279.8096
FIRST LVL	SW2	EQX1	Bottom	0.448	-15.948	-1.532	8.866	20.3995	-439.285
FIRST LVL	SW2	EQX2	Top	0.448	-7.804	-1.529	2.5131	35.6671	-204.0647
FIRST LVL	SW2	EQX2	Bottom	0.448	-7.804	-1.529	2.5131	20.3743	-282.1032
FIRST LVL	SW2	EQX3	Top	0.448	-24.091	-1.534	15.2189	35.762	-355.5545
FIRST LVL	SW2	EQX3	Bottom	0.448	-24.091	-1.534	15.2189	20.4247	-596.4667
FIRST LVL	SW2	EQY1	Top	0.001	150.183	0.064	-20.6896	0.0385	1729.5494
FIRST LVL	SW2	EQY1	Bottom	0.001	150.183	0.064	-20.6896	0.6757	3231.3766
FIRST LVL	SW2	EQY2	Top	0.001	137.409	0.051	-11.13	0.1866	1607.9856
FIRST LVL	SW2	EQY2	Bottom	0.001	137.409	0.051	-11.13	0.6964	2982.0764
FIRST LVL	SW2	EQY3	Top	0.002	162.956	0.076	-30.2491	-0.1097	1851.1132
FIRST LVL	SW2	EQY3	Bottom	0.002	162.956	0.076	-30.2491	0.655	3480.6768
FIRST LVL	SW2	Wind-X	Top	0.063	-1.912	-0.096	0.6473	4.3488	-24.7619
FIRST LVL	SW2	Wind-X	Bottom	0.063	-1.912	-0.096	0.6473	3.3844	-43.8827
FIRST LVL	SW2	Wind-Y	Top	-0.0004416	48.595	-0.038	-4.7866	0.5321	588.2393
FIRST LVL	SW2	Wind-Y	Bottom	-0.0004416	48.595	-0.038	-4.7866	0.1473	1074.189
FIRST LVL	SW4	Dead	Top	-497.061	7.964	-0.147	-5.5665	0.9938	-848.4067
FIRST LVL	SW4	Dead	Bottom	-541.028	7.964	-0.147	-5.5665	-0.4804	-766.0911
FIRST LVL	SW4	Extra Dead	Top	-63.853	-14.314	-0.105	15.0719	0.8868	-157.0177
FIRST LVL	SW4	Extra Dead	Bottom	-63.853	-14.314	-0.105	15.0719	-0.1617	-300.1623
FIRST LVL	SW4	EQX1	Top	-0.443	4.854	-1.106	12.186	36.5184	530.3909
FIRST LVL	SW4	EQX1	Bottom	-0.443	4.854	-1.106	12.186	25.4582	578.9308

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
FIRST LVL	SW4	EQX2	Top	-0.442	-1.716	-1.055	5.8479	36.3362	444.4737
FIRST LVL	SW4	EQX2	Bottom	-0.442	-1.716	-1.055	5.8479	25.7842	427.3114
FIRST LVL	SW4	EQX3	Top	-0.443	11.424	-1.157	18.5242	36.7006	616.3081
FIRST LVL	SW4	EQX3	Bottom	-0.443	11.424	-1.157	18.5242	25.1323	730.5503
FIRST LVL	SW4	EQY1	Top	-0.005	94.664	0.038	-21.1494	-1.1496	1135.2508
FIRST LVL	SW4	EQY1	Bottom	-0.005	94.664	0.038	-21.1494	-0.7707	2081.8939
FIRST LVL	SW4	EQY2	Top	-0.006	104.381	-0.033	-11.4497	-0.906	1292.2363
FIRST LVL	SW4	EQY2	Bottom	-0.006	104.381	-0.033	-11.4497	-1.2357	2336.0495
FIRST LVL	SW4	EQY3	Top	-0.005	84.947	0.109	-30.8491	-1.3933	978.2654
FIRST LVL	SW4	EQY3	Bottom	-0.005	84.947	0.109	-30.8491	-0.3057	1827.7383
FIRST LVL	SW4	Wind-X	Top	-0.062	0.289	-0.043	0.3343	4.5615	65.7584
FIRST LVL	SW4	Wind-X	Bottom	-0.062	0.289	-0.043	0.3343	4.1308	68.6486
FIRST LVL	SW4	Wind-Y	Top	-0.003	35.675	0.023	-3.6891	-0.4369	579.9776
FIRST LVL	SW4	Wind-Y	Bottom	-0.003	35.675	0.023	-3.6891	-0.2109	936.7234
FIRST LVL	LW1	Dead	Top	-240.806	-7.78	-0.216	-3.5402	-2.4139	91.0308
FIRST LVL	LW1	Dead	Bottom	-288.683	-7.78	-0.216	-3.5935	-4.5722	77.0093
FIRST LVL	LW1	Extra Dead	Top	-15.094	-2.987	0.053	11.6437	-10.7234	79.2192
FIRST LVL	LW1	Extra Dead	Bottom	-15.094	-2.987	0.053	11.6568	-10.1924	53.0823
FIRST LVL	LW1	EQX1	Top	490.428	195.912	-0.244	10.4468	0.2833	-6660.0182
FIRST LVL	LW1	EQX1	Bottom	490.428	195.912	-0.244	10.3865	-2.1553	-4822.0719
FIRST LVL	LW1	EQX2	Top	490.599	195.522	-0.214	4.9901	0.6468	-6648.6291
FIRST LVL	LW1	EQX2	Bottom	490.599	195.522	-0.214	4.9372	-1.4917	-4814.6313
FIRST LVL	LW1	EQX3	Top	490.256	196.303	-0.274	15.9035	-0.0802	-6671.4074
FIRST LVL	LW1	EQX3	Bottom	490.256	196.303	-0.274	15.8359	-2.8189	-4829.5126
FIRST LVL	LW1	EQY1	Top	-2.302	2.499	1.326	-20.5631	0.7781	-78.0988
FIRST LVL	LW1	EQY1	Bottom	-2.302	2.499	1.326	-20.2353	14.0417	-52.5396
FIRST LVL	LW1	EQY2	Top	-2.7	3.332	1.281	-12.2462	0.1769	-102.1927
FIRST LVL	LW1	EQY2	Bottom	-2.7	3.332	1.281	-11.9297	12.9863	-68.2064
FIRST LVL	LW1	EQY3	Top	-1.903	1.666	1.372	-28.8799	1.3793	-54.0049
FIRST LVL	LW1	EQY3	Bottom	-1.903	1.666	1.372	-28.541	15.097	-36.8727
FIRST LVL	LW1	Wind-X	Top	68.432	24.368	0.0002103	0.8565	-0.4029	-969.3996
FIRST LVL	LW1	Wind-X	Bottom	68.432	24.368	0.0002103	0.8565	-0.4008	-742.6285
FIRST LVL	LW1	Wind-Y	Top	-1.78	1.76	0.475	-3.9299	0.6076	-55.5663
FIRST LVL	LW1	Wind-Y	Bottom	-1.78	1.76	0.475	-3.8125	5.3607	-37.5314
FIRST LVL	LW2	Dead	Top	-249.905	2.963	-0.745	-4.7103	0.7711	26.4966
FIRST LVL	LW2	Dead	Bottom	-297.782	2.963	-0.745	-4.5859	-6.6829	11.5167
FIRST LVL	LW2	Extra Dead	Top	-17.711	0.973	-0.439	13.3281	-3.9648	-18.326
FIRST LVL	LW2	Extra Dead	Bottom	-17.711	0.973	-0.439	13.4014	-8.3567	-11.5514
FIRST LVL	LW2	EQX1	Top	-490.429	200.588	-0.291	10.4581	2.1883	-6783.0117
FIRST LVL	LW2	EQX1	Bottom	-490.429	200.588	-0.291	10.5067	-0.7229	-4859.0022
FIRST LVL	LW2	EQX2	Top	-490.601	200.654	-0.274	5.0519	1.7836	-6783.1544
FIRST LVL	LW2	EQX2	Bottom	-490.601	200.654	-0.274	5.0976	-0.9528	-4858.5222
FIRST LVL	LW2	EQX3	Top	-490.257	200.523	-0.309	15.8644	2.5931	-6782.869
FIRST LVL	LW2	EQX3	Bottom	-490.257	200.523	-0.309	15.9159	-0.493	-4859.4822
FIRST LVL	LW2	EQY1	Top	2.315	-0.17	0.602	-19.238	4.312	-5.6964



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
FIRST LVL	LW2	EQY1	Bottom	2.315	-0.17	0.602	-19.3385	10.3311	-7.0052
FIRST LVL	LW2	EQY2	Top	2.714	-0.32	0.576	-11.0207	4.8829	-4.2312
FIRST LVL	LW2	EQY2	Bottom	2.714	-0.32	0.576	-11.1169	10.6452	-6.975
FIRST LVL	LW2	EQY3	Top	1.916	-0.019	0.628	-27.4554	3.7411	-7.1615
FIRST LVL	LW2	EQY3	Bottom	1.916	-0.019	0.628	-27.5602	10.017	-7.0355
FIRST LVL	LW2	Wind-X	Top	-68.433	25.055	-0.055	1.0296	0.6663	-985.4462
FIRST LVL	LW2	Wind-X	Bottom	-68.433	25.055	-0.055	1.0388	0.117	-746.3215
FIRST LVL	LW2	Wind-Y	Top	1.785	0.03	0.274	-4.0979	0.4952	-6.5792
FIRST LVL	LW2	Wind-Y	Bottom	1.785	0.03	0.274	-4.1436	3.2364	-5.9779
FIRST LVL	LW3	Dead	Top	-279.983	-8.723	-0.71	-1.6672	1.4332	87.3408
FIRST LVL	LW3	Dead	Bottom	-327.788	-8.723	-0.71	-1.8478	-5.6716	75.6686
FIRST LVL	LW3	Extra Dead	Top	-17.866	0.927	-0.215	13.6729	-3.5195	-28.5649
FIRST LVL	LW3	Extra Dead	Bottom	-17.866	0.927	-0.215	13.6184	-5.667	-14.7543
FIRST LVL	LW3	EQX1	Top	483.155	200.46	0.304	10.5525	-1.4918	-6763.8009
FIRST LVL	LW3	EQX1	Bottom	483.155	200.46	0.304	10.6299	1.5525	-4882.0061
FIRST LVL	LW3	EQX2	Top	482.906	200.606	0.28	5.0845	-1.2083	-6766.5485
FIRST LVL	LW3	EQX2	Bottom	482.906	200.606	0.28	5.1558	1.5933	-4883.2323
FIRST LVL	LW3	EQX3	Top	483.404	200.315	0.329	16.0204	-1.7752	-6761.0532
FIRST LVL	LW3	EQX3	Bottom	483.404	200.315	0.329	16.104	1.5117	-4880.7798
FIRST LVL	LW3	EQY1	Top	2.175	-1.096	0.63	-17.0189	3.9666	24.9302
FIRST LVL	LW3	EQY1	Bottom	2.175	-1.096	0.63	-16.8587	10.2701	13.4179
FIRST LVL	LW3	EQY2	Top	2.695	-1.367	0.67	-8.6976	3.6159	31.2254
FIRST LVL	LW3	EQY2	Bottom	2.695	-1.367	0.67	-8.5271	10.3208	16.8692
FIRST LVL	LW3	EQY3	Top	1.655	-0.825	0.59	-25.3402	4.3173	18.635
FIRST LVL	LW3	EQY3	Bottom	1.655	-0.825	0.59	-25.1902	10.2194	9.9666
FIRST LVL	LW3	Wind-X	Top	67.373	25.055	0.013	0.9215	-0.3206	-982.6971
FIRST LVL	LW3	Wind-X	Bottom	67.373	25.055	0.013	0.9248	-0.1909	-749.2692
FIRST LVL	LW3	Wind-Y	Top	1.748	-0.526	0.302	-2.6279	2.1571	15.8388
FIRST LVL	LW3	Wind-Y	Bottom	1.748	-0.526	0.302	-2.5512	5.1749	10.1367
FIRST LVL	LW4	Dead	Top	-271.765	12.489	-0.216	-3.1674	-2.4	-227.5329
FIRST LVL	LW4	Dead	Bottom	-319.642	12.489	-0.216	-3.1313	-4.5609	-150.9007
FIRST LVL	LW4	Extra Dead	Top	-14.539	1.266	-0.149	13.4525	-1.5085	-37.2746
FIRST LVL	LW4	Extra Dead	Bottom	-14.539	1.266	-0.149	13.4773	-2.9992	-27.0406
FIRST LVL	LW4	EQX1	Top	-483.15	201.118	0.066	10.0245	1.7156	-6853.3346
FIRST LVL	LW4	EQX1	Bottom	-483.15	201.118	0.066	10.0136	2.3711	-4922.8157
FIRST LVL	LW4	EQX2	Top	-482.901	201.304	-0.007	4.6848	1.369	-6858.6155
FIRST LVL	LW4	EQX2	Bottom	-482.901	201.304	-0.007	4.686	1.2991	-4926.1978
FIRST LVL	LW4	EQX3	Top	-483.399	200.932	0.138	15.3642	2.0621	-6848.0537
FIRST LVL	LW4	EQX3	Bottom	-483.399	200.932	0.138	15.3411	3.443	-4919.4336
FIRST LVL	LW4	EQY1	Top	-2.155	-2.119	0.642	-17.9627	2.205	69.1184
FIRST LVL	LW4	EQY1	Bottom	-2.155	-2.119	0.642	-18.0698	8.6211	47.5685
FIRST LVL	LW4	EQY2	Top	-2.675	-2.471	0.75	-9.8359	2.8007	79.8054
FIRST LVL	LW4	EQY2	Bottom	-2.675	-2.471	0.75	-9.9611	10.3013	54.6502
FIRST LVL	LW4	EQY3	Top	-1.636	-1.767	0.533	-26.0896	1.6093	58.4314
FIRST LVL	LW4	EQY3	Bottom	-1.636	-1.767	0.533	-26.1786	6.941	40.4867

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
FIRST LVL	LW4	Wind-X	Top	-67.372	25.219	0.054	0.8536	0.0985	-995.476
FIRST LVL	LW4	Wind-X	Bottom	-67.372	25.219	0.054	0.8446	0.6381	-754.5344
FIRST LVL	LW4	Wind-Y	Top	-1.741	-1.458	0.282	-3.459	0.1081	48.6922
FIRST LVL	LW4	Wind-Y	Bottom	-1.741	-1.458	0.282	-3.5062	2.9298	33.8176
FIRST LVL	SW5	Dead	Top	-257.788	0.487	-0.384	-3.7611	2.8508	-310.7639
FIRST LVL	SW5	Dead	Bottom	-305.683	0.487	-0.384	-3.5955	-0.9915	-428.4002
FIRST LVL	SW5	Extra Dead	Top	-24.368	4.286	-0.051	24.8011	-0.0875	40.826
FIRST LVL	SW5	Extra Dead	Bottom	-24.368	4.286	-0.051	24.8229	-0.5944	73.1833
FIRST LVL	SW5	EQX1	Top	2.057E-05	26.752	-2.847	14.0075	70.9732	249.7554
FIRST LVL	SW5	EQX1	Bottom	2.057E-05	26.752	-3.223	18.4656	40.6902	517.2705
FIRST LVL	SW5	EQX2	Top	9.866E-06	15.542	-2.811	5.2368	71.3414	170.968
FIRST LVL	SW5	EQX2	Bottom	9.866E-06	15.542	-3.188	9.6798	41.4097	326.3838
FIRST LVL	SW5	EQX3	Top	3.127E-05	37.961	-2.882	22.7782	70.605	328.5428
FIRST LVL	SW5	EQX3	Bottom	3.127E-05	37.961	-3.258	27.2515	39.9708	708.1573
FIRST LVL	SW5	EQY1	Top	8.852E-05	89.557	-0.14	-29.7643	0.4235	621.6828
FIRST LVL	SW5	EQY1	Bottom	8.852E-05	89.858	-0.14	-29.7039	-0.9776	1518.7034
FIRST LVL	SW5	EQY2	Top	0.0001048	107.18	-0.179	-16.3573	-0.1714	752.1699
FIRST LVL	SW5	EQY2	Bottom	0.0001048	107.482	-0.179	-16.2803	-1.9568	1825.4288
FIRST LVL	SW5	EQY3	Top	7.219E-05	71.933	-0.102	-43.1714	1.0185	491.1957
FIRST LVL	SW5	EQY3	Bottom	7.219E-05	72.234	-0.102	-43.1275	0.0016	1211.9781
FIRST LVL	SW5	Wind-X	Top	0	3.001	-0.309	2.9748	9.0824	25.8315
FIRST LVL	SW5	Wind-X	Bottom	0	3.001	-0.309	3.1081	5.9913	55.8451
FIRST LVL	SW5	Wind-Y	Top	4.108E-05	40.452	0.013	-4.9654	0.6175	306.9117
FIRST LVL	SW5	Wind-Y	Bottom	4.108E-05	40.452	0.013	-4.9709	0.7447	711.4349
FIRST LVL	SW3	Dead	Top	-466.085	27.109	0.022	-3.2603	-0.0396	-759.2202
FIRST LVL	SW3	Dead	Bottom	-504.218	27.109	0.022	-3.2603	0.1853	-478.4704
FIRST LVL	SW3	Extra Dead	Top	-61.853	-21.188	-0.02	13.924	0.1573	-466.2837
FIRST LVL	SW3	Extra Dead	Bottom	-61.853	-21.188	-0.02	13.924	-0.0475	-678.1602
FIRST LVL	SW3	EQX1	Top	-0.003	-1.415	-1.126	8.1845	34.1266	29.3762
FIRST LVL	SW3	EQX1	Bottom	-0.003	-1.415	-1.126	8.1845	22.8637	15.2241
FIRST LVL	SW3	EQX2	Top	-0.004	-0.737	-1.133	2.1695	34.1599	23.7459
FIRST LVL	SW3	EQX2	Bottom	-0.004	-0.737	-1.133	2.1695	22.828	16.379
FIRST LVL	SW3	EQX3	Top	-0.003	-2.094	-1.119	14.1995	34.0934	35.0065
FIRST LVL	SW3	EQX3	Bottom	-0.003	-2.094	-1.119	14.1995	22.8994	14.0691
FIRST LVL	SW3	EQY1	Top	-0.03	84.393	0.051	-18.4251	-0.1236	792.2093
FIRST LVL	SW3	EQY1	Bottom	-0.03	84.393	0.051	-18.4251	0.3867	1636.1344
FIRST LVL	SW3	EQY2	Top	-0.029	83.14	0.057	-9.3326	-0.1438	807.5624
FIRST LVL	SW3	EQY2	Bottom	-0.029	83.14	0.057	-9.3326	0.4236	1638.9629
FIRST LVL	SW3	EQY3	Top	-0.031	85.645	0.045	-27.5177	-0.1034	776.8562
FIRST LVL	SW3	EQY3	Bottom	-0.031	85.645	0.045	-27.5177	0.3498	1633.3059
FIRST LVL	SW3	Wind-X	Top	-0.0003637	-0.196	-0.069	0.1789	4.2992	5.1532
FIRST LVL	SW3	Wind-X	Bottom	-0.0003637	-0.196	-0.069	0.1789	3.6141	3.1945
FIRST LVL	SW3	Wind-Y	Top	-0.009	27.917	-0.01	-3.7621	0.1915	347.0166
FIRST LVL	SW3	Wind-Y	Bottom	-0.009	27.917	-0.01	-3.7621	0.0935	626.1864
GROUND FLOOR	WP1	Dead	Top	-137.173	21.366	-0.015	-0.6269	0.1258	-115.8811

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	WP1	Dead	Bottom	-149.048	21.366	-0.015	-0.6269	-0.0271	97.7807
GROUND FLOOR	WP1	Extra Dead	Top	-7.782	-1.444	0.013	2.2736	0.6356	-51.2945
GROUND FLOOR	WP1	Extra Dead	Bottom	-7.782	-1.444	0.013	2.2736	0.7664	-65.7312
GROUND FLOOR	WP1	EQX1	Top	-0.002	-0.918	-0.102	1.7494	3.8897	-12.1632
GROUND FLOOR	WP1	EQX1	Bottom	-0.002	-0.918	-0.102	1.7494	2.865	-21.348
GROUND FLOOR	WP1	EQX2	Top	-0.001	-0.459	-0.104	0.6424	3.7909	-9.2399
GROUND FLOOR	WP1	EQX2	Bottom	-0.001	-0.459	-0.104	0.6424	2.7556	-13.8311
GROUND FLOOR	WP1	EQX3	Top	-0.004	-1.378	-0.101	2.8564	3.9885	-15.0864
GROUND FLOOR	WP1	EQX3	Bottom	-0.004	-1.378	-0.101	2.8564	2.9743	-28.8648
GROUND FLOOR	WP1	EQY1	Top	0.017	6.548	-0.036	-3.4752	-0.2868	53.0714
GROUND FLOOR	WP1	EQY1	Bottom	0.017	6.548	-0.036	-3.4752	-0.6499	118.55
GROUND FLOOR	WP1	EQY2	Top	0.016	5.85	-0.034	-1.8084	-0.1228	47.9147
GROUND FLOOR	WP1	EQY2	Bottom	0.016	5.85	-0.034	-1.8084	-0.4632	106.4176
GROUND FLOOR	WP1	EQY3	Top	0.019	7.245	-0.039	-5.142	-0.4509	58.2282
GROUND FLOOR	WP1	EQY3	Bottom	0.019	7.245	-0.039	-5.142	-0.8365	130.6824
GROUND FLOOR	WP1	Wind-X	Top	-0.0002389	-0.098	-0.011	0.0726	0.5899	-1.4475
GROUND FLOOR	WP1	Wind-X	Bottom	-0.0002389	-0.098	-0.011	0.0726	0.4805	-2.4315
GROUND FLOOR	WP1	Wind-Y	Top	0.006	1.994	-0.002	-0.8398	-0.055	16.0868
GROUND FLOOR	WP1	Wind-Y	Bottom	0.006	1.994	-0.002	-0.8398	-0.0732	36.0302
GROUND FLOOR	WP3	Dead	Top	-291.776	-4.253	-0.062	-1.6358	0.3113	-332.7803
GROUND FLOOR	WP3	Dead	Bottom	-322.145	-4.253	-0.062	-1.6358	-0.3076	-373.9789
GROUND FLOOR	WP3	Extra Dead	Top	-542.813	-27.911	-0.047	5.6563	-1.1426	-1080.1444
GROUND FLOOR	WP3	Extra Dead	Bottom	-542.813	-27.911	-0.047	5.6563	-1.6141	-1359.2573
GROUND FLOOR	WP3	EQX1	Top	1.047E-05	-8.992	-0.553	4.5489	11.3335	-337.7901
GROUND FLOOR	WP3	EQX1	Bottom	1.047E-05	-8.992	-0.614	4.6876	5.4005	-427.7059
GROUND FLOOR	WP3	EQX2	Top	5.293E-06	-2.997	-0.575	2.1437	11.6503	-245.8156
GROUND FLOOR	WP3	EQX2	Bottom	5.293E-06	-2.997	-0.636	2.2824	5.4922	-275.7852
GROUND FLOOR	WP3	EQX3	Top	1.565E-05	-14.986	-0.53	6.9542	11.0167	-429.7646
GROUND FLOOR	WP3	EQX3	Bottom	1.565E-05	-14.986	-0.591	7.0929	5.3089	-579.6267
GROUND FLOOR	WP3	EQY1	Top	-7.244E-05	82.431	-0.066	-8.1991	1.332	1549.9138
GROUND FLOOR	WP3	EQY1	Bottom	-7.244E-05	82.48	-0.066	-8.1991	0.6756	2374.547
GROUND FLOOR	WP3	EQY2	Top	-6.448E-05	73.574	-0.035	-4.5447	0.8386	1392.2358
GROUND FLOOR	WP3	EQY2	Bottom	-6.448E-05	73.622	-0.035	-4.5447	0.4914	2128.2968
GROUND FLOOR	WP3	EQY3	Top	-8.041E-05	91.288	-0.097	-11.8535	1.8254	1707.5919
GROUND FLOOR	WP3	EQY3	Bottom	-8.041E-05	91.337	-0.097	-11.8535	0.8597	2620.7973
GROUND FLOOR	WP3	Wind-X	Top	0	-0.883	-0.052	0.4838	1.4941	-38.6962
GROUND FLOOR	WP3	Wind-X	Bottom	0	-0.883	-0.052	0.4838	0.9745	-47.5289
GROUND FLOOR	WP3	Wind-Y	Top	-2.419E-05	25.958	-0.097	-1.6007	0.8133	468.1828
GROUND FLOOR	WP3	Wind-Y	Bottom	-2.419E-05	25.958	-0.097	-1.6007	-0.1536	727.7657
GROUND FLOOR	WP4	Dead	Top	-74.054	-3.314	0.008	-0.5436	-0.0618	-7.9406
GROUND FLOOR	WP4	Dead	Bottom	-82.786	-3.314	0.008	-0.5436	0.0217	-41.4405
GROUND FLOOR	WP4	Extra Dead	Top	-106.07	-5.224	-6.302E-05	1.4803	-0.6114	-41.7098
GROUND FLOOR	WP4	Extra Dead	Bottom	-106.07	-5.224	-6.302E-05	1.4803	-0.6121	-93.9511
GROUND FLOOR	WP4	EQX1	Top	0.007	-0.466	-0.172	1.168	2.7992	-14.8098
GROUND FLOOR	WP4	EQX1	Bottom	0.007	-0.466	-0.172	1.168	1.0836	-19.4727

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	WP4	EQX2	Top	0.003	-0.116	-0.167	0.4157	2.8709	-11.3666
GROUND FLOOR	WP4	EQX2	Bottom	0.003	-0.116	-0.167	0.4157	1.2003	-12.5225
GROUND FLOOR	WP4	EQX3	Top	0.011	-0.817	-0.176	1.9204	2.7275	-18.253
GROUND FLOOR	WP4	EQX3	Bottom	0.011	-0.817	-0.176	1.9204	0.9669	-26.4228
GROUND FLOOR	WP4	EQY1	Top	-0.05	4.783	0.037	-2.3847	0.2303	61.5395
GROUND FLOOR	WP4	EQY1	Bottom	-0.05	4.783	0.037	-2.3847	0.5976	109.3713
GROUND FLOOR	WP4	EQY2	Top	-0.044	4.272	0.029	-1.2545	0.1134	55.4002
GROUND FLOOR	WP4	EQY2	Bottom	-0.044	4.272	0.029	-1.2545	0.4067	98.1204
GROUND FLOOR	WP4	EQY3	Top	-0.055	5.294	0.044	-3.5148	0.3471	67.6787
GROUND FLOOR	WP4	EQY3	Bottom	-0.055	5.294	0.044	-3.5148	0.7884	120.6222
GROUND FLOOR	WP4	Wind-X	Top	0.001	-0.051	-0.023	0.0253	0.4504	-1.6763
GROUND FLOOR	WP4	Wind-X	Bottom	0.001	-0.051	-0.023	0.0253	0.2248	-2.1837
GROUND FLOOR	WP4	Wind-Y	Top	-0.017	1.494	0.004	-0.5861	0.06	18.293
GROUND FLOOR	WP4	Wind-Y	Bottom	-0.017	1.494	0.004	-0.5861	0.0964	33.2357
GROUND FLOOR	WP5	Dead	Top	-150.477	-17.144	0.018	-1.2296	-0.2742	43.9987
GROUND FLOOR	WP5	Dead	Bottom	-163.321	-17.144	0.018	-1.2296	-0.0943	-128.0971
GROUND FLOOR	WP5	Extra Dead	Top	-8.168	0.052	-0.027	3.6182	-1.072	3.0129
GROUND FLOOR	WP5	Extra Dead	Bottom	-8.168	0.052	-0.027	3.6182	-1.344	3.5331
GROUND FLOOR	WP5	EQX1	Top	-0.003	0.551	-0.333	2.5571	6.1835	20.2585
GROUND FLOOR	WP5	EQX1	Bottom	-0.003	0.551	-0.333	2.5571	2.8577	25.7684
GROUND FLOOR	WP5	EQX2	Top	-0.002	0.129	-0.331	0.7131	6.3658	15.5871
GROUND FLOOR	WP5	EQX2	Bottom	-0.002	0.129	-0.331	0.7131	3.0509	16.8781
GROUND FLOOR	WP5	EQX3	Top	-0.005	0.973	-0.334	4.4011	6.0013	24.9299
GROUND FLOOR	WP5	EQX3	Bottom	-0.005	0.973	-0.334	4.4011	2.6644	34.6588
GROUND FLOOR	WP5	EQY1	Top	-0.013	3.388	0.014	-5.6271	0.7348	35.5414
GROUND FLOOR	WP5	EQY1	Bottom	-0.013	3.388	0.014	-5.6271	0.874	69.4179
GROUND FLOOR	WP5	EQY2	Top	-0.016	4.023	0.009	-2.8641	0.453	43.6711
GROUND FLOOR	WP5	EQY2	Bottom	-0.016	4.023	0.009	-2.8641	0.54	83.906
GROUND FLOOR	WP5	EQY3	Top	-0.011	2.752	0.019	-8.3901	1.0165	27.4117
GROUND FLOOR	WP5	EQY3	Bottom	-0.011	2.752	0.019	-8.3901	1.208	54.9299
GROUND FLOOR	WP5	Wind-X	Top	-0.0003127	0.018	-0.041	0.0383	0.9153	2.5815
GROUND FLOOR	WP5	Wind-X	Bottom	-0.0003127	0.018	-0.041	0.0383	0.5011	2.7579
GROUND FLOOR	WP5	Wind-Y	Top	-0.006	1.344	-0.036	-1.5132	0.3592	18.2918
GROUND FLOOR	WP5	Wind-Y	Bottom	-0.006	1.344	-0.036	-1.5132	-0.0052	31.7328
GROUND FLOOR	WP6	Dead	Top	-156.224	-4.045	0.305	-1.778	-0.8839	-274.5802
GROUND FLOOR	WP6	Dead	Bottom	-189.505	-4.045	0.305	-1.778	2.1675	-315.0286
GROUND FLOOR	WP6	Extra Dead	Top	-24.857	2.804	0.109	10.0399	1.0611	23.0471
GROUND FLOOR	WP6	Extra Dead	Bottom	-24.857	2.804	0.109	10.0399	2.1503	51.0866
GROUND FLOOR	WP6	EQX1	Top	-2.201E-05	11.586	0.442	8.3463	12.3699	158.7903
GROUND FLOOR	WP6	EQX1	Bottom	-2.201E-05	11.586	0.039	8.4729	14.8339	274.6457
GROUND FLOOR	WP6	EQX2	Top	-1.051E-05	6.452	0.508	4.3577	11.9417	111.1595
GROUND FLOOR	WP6	EQX2	Bottom	-1.051E-05	6.452	0.105	4.4843	15.0676	175.6833
GROUND FLOOR	WP6	EQX3	Top	-3.35E-05	16.719	0.376	12.3349	12.7981	206.421
GROUND FLOOR	WP6	EQX3	Bottom	-3.35E-05	16.719	-0.027	12.4615	14.6002	373.6081
GROUND FLOOR	WP6	EQY1	Top	-9.516E-05	41.24	0.306	-12.7955	-2.2758	360.9742

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	WP6	EQY1	Bottom	-9.516E-05	41.563	0.306	-12.7955	0.7814	774.9424
GROUND FLOOR	WP6	EQY2	Top	-0.0001127	49.117	0.22	-6.7199	-1.6577	441.5728
GROUND FLOOR	WP6	EQY2	Bottom	-0.0001127	49.439	0.22	-6.7199	0.5454	934.3044
GROUND FLOOR	WP6	EQY3	Top	-7.765E-05	33.364	0.391	-18.871	-2.8938	280.3756
GROUND FLOOR	WP6	EQY3	Bottom	-7.765E-05	33.686	0.391	-18.871	1.0174	615.5803
GROUND FLOOR	WP6	Wind-X	Top	0	1.394	0.126	1.1962	1.9665	17.2391
GROUND FLOOR	WP6	Wind-X	Bottom	0	1.394	0.126	1.1962	3.2303	31.1807
GROUND FLOOR	WP6	Wind-Y	Top	-4.412E-05	17.433	0.314	-1.7811	-1.8268	176.1066
GROUND FLOOR	WP6	Wind-Y	Bottom	-4.412E-05	17.433	0.314	-1.7811	1.3155	350.4366
GROUND FLOOR	SW1	Dead	Top	-470.664	-26.415	-0.135	-3.0434	0.6503	-404.9285
GROUND FLOOR	SW1	Dead	Bottom	-516.08	-26.415	-0.135	-3.0434	-0.7046	-669.0814
GROUND FLOOR	SW1	Extra Dead	Top	-272.118	-13.753	0.022	16.5911	0.3616	-1849.4068
GROUND FLOOR	SW1	Extra Dead	Bottom	-272.118	-13.753	0.022	16.5911	0.5821	-1986.9391
GROUND FLOOR	SW1	EQX1	Top	3.128E-05	-17.314	-1.286	12.5861	30.7403	-495.9727
GROUND FLOOR	SW1	EQX1	Bottom	3.128E-05	-17.314	-1.286	12.5861	17.8788	-669.1101
GROUND FLOOR	SW1	EQX2	Top	1.541E-05	-6.563	-1.275	6.826	30.6232	-354.9157
GROUND FLOOR	SW1	EQX2	Bottom	1.541E-05	-6.563	-1.275	6.826	17.8756	-420.5456
GROUND FLOOR	SW1	EQX3	Top	4.715E-05	-28.065	-1.298	18.3461	30.8574	-637.0297
GROUND FLOOR	SW1	EQX3	Bottom	4.715E-05	-28.065	-1.298	18.3461	17.882	-917.6747
GROUND FLOOR	SW1	EQY1	Top	-0.0002202	148.895	-0.201	-20.3632	0.8264	2344.3566
GROUND FLOOR	SW1	EQY1	Bottom	-0.0002202	148.895	-0.201	-20.3632	-1.1876	3833.3094
GROUND FLOOR	SW1	EQY2	Top	-0.0001959	132.836	-0.218	-11.5449	1.0165	2105.5061
GROUND FLOOR	SW1	EQY2	Bottom	-0.0001959	132.836	-0.218	-11.5449	-1.1619	3433.8623
GROUND FLOOR	SW1	EQY3	Top	-0.0002445	164.955	-0.185	-29.1815	0.6363	2583.2071
GROUND FLOOR	SW1	EQY3	Bottom	-0.0002445	164.955	-0.185	-29.1815	-1.2132	4232.7565
GROUND FLOOR	SW1	Wind-X	Top	0	-1.322	-0.151	1.8365	4.6014	-63.2776
GROUND FLOOR	SW1	Wind-X	Bottom	0	-1.322	-0.151	1.8365	3.0893	-76.5018
GROUND FLOOR	SW1	Wind-Y	Top	-7.357E-05	46.998	-0.039	-2.2011	0.1943	710.5219
GROUND FLOOR	SW1	Wind-Y	Bottom	-7.357E-05	46.998	-0.039	-2.2011	-0.1955	1180.5017
GROUND FLOOR	SW2	Dead	Top	-752.323	7.095	-0.114	-5.2194	0.5504	-855.3335
GROUND FLOOR	SW2	Dead	Bottom	-793.123	7.095	-0.114	-5.2194	-0.5903	-783.5854
GROUND FLOOR	SW2	Extra Dead	Top	-615.484	75.828	-0.001	13.1714	0.0362	-2899.9148
GROUND FLOOR	SW2	Extra Dead	Bottom	-615.484	75.828	-0.001	13.1714	0.0307	-2141.6393
GROUND FLOOR	SW2	EQX1	Top	0.644	-17.251	-0.75	10.3288	20.5	-439.2849
GROUND FLOOR	SW2	EQX1	Bottom	0.644	-17.251	-0.75	10.3288	13.0015	-611.7931
GROUND FLOOR	SW2	EQX2	Top	0.644	-7.318	-0.746	3.6339	20.4748	-282.1032
GROUND FLOOR	SW2	EQX2	Bottom	0.644	-7.318	-0.746	3.6339	13.0123	-355.282
GROUND FLOOR	SW2	EQX3	Top	0.643	-27.184	-0.753	17.0237	20.5252	-596.4666
GROUND FLOOR	SW2	EQX3	Bottom	0.643	-27.184	-0.753	17.0237	12.9906	-868.3043
GROUND FLOOR	SW2	EQY1	Top	0.0001929	176.819	-0.129	-20.7113	0.6751	3231.3759
GROUND FLOOR	SW2	EQY1	Bottom	0.0001929	176.819	-0.129	-20.7113	-0.6178	4999.5695
GROUND FLOOR	SW2	EQY2	Top	-0.001	161.662	-0.132	-10.6618	0.6958	2982.0758
GROUND FLOOR	SW2	EQY2	Bottom	-0.001	161.662	-0.132	-10.6618	-0.6229	4598.6946
GROUND FLOOR	SW2	EQY3	Top	0.001	191.977	-0.127	-30.7609	0.6544	3480.6761
GROUND FLOOR	SW2	EQY3	Bottom	0.001	191.977	-0.127	-30.7609	-0.6128	5400.4443

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	SW2	Wind-X	Top	0.091	-1.89	-0.118	0.5587	3.3986	-43.8827
GROUND FLOOR	SW2	Wind-X	Bottom	0.091	-1.89	-0.118	0.5587	2.2207	-62.7815
GROUND FLOOR	SW2	Wind-Y	Top	-0.001	58.176	-0.027	-5.6947	0.147	1074.1887
GROUND FLOOR	SW2	Wind-Y	Bottom	-0.001	58.176	-0.027	-5.6947	-0.1191	1655.9513
GROUND FLOOR	SW4	Dead	Top	-724.604	5.294	0.093	-4.7555	-0.5386	-849.5483
GROUND FLOOR	SW4	Dead	Bottom	-768.571	5.294	0.093	-4.7555	0.3934	-793.9409
GROUND FLOOR	SW4	Extra Dead	Top	-72.463	-12.94	0.032	14.9081	-0.1681	-213.1018
GROUND FLOOR	SW4	Extra Dead	Bottom	-72.463	-12.94	0.032	14.9081	0.1481	-342.5025
GROUND FLOOR	SW4	EQX1	Top	-0.637	6.947	-1.035	10.3804	25.5577	578.9308
GROUND FLOOR	SW4	EQX1	Bottom	-0.637	6.947	-1.035	10.3804	15.2037	648.4026
GROUND FLOOR	SW4	EQX2	Top	-0.637	-1.112	-1.102	1.4674	25.8836	427.3114
GROUND FLOOR	SW4	EQX2	Bottom	-0.637	-1.112	-1.102	1.4674	14.8603	416.1957
GROUND FLOOR	SW4	EQX3	Top	-0.638	15.006	-0.968	19.2935	25.2318	730.5502
GROUND FLOOR	SW4	EQX3	Bottom	-0.638	15.006	-0.968	19.2935	15.5471	880.6094
GROUND FLOOR	SW4	EQY1	Top	-0.007	116.565	0.137	-22.3534	-0.7699	2081.8934
GROUND FLOOR	SW4	EQY1	Bottom	-0.007	116.565	0.137	-22.3534	0.5983	3247.5445
GROUND FLOOR	SW4	EQY2	Top	-0.008	128.401	0.232	-9.1546	-1.2348	2336.049
GROUND FLOOR	SW4	EQY2	Bottom	-0.008	128.401	0.232	-9.1546	1.0823	3620.0606
GROUND FLOOR	SW4	EQY3	Top	-0.006	104.729	0.042	-35.5521	-0.305	1827.7379
GROUND FLOOR	SW4	EQY3	Bottom	-0.006	104.729	0.042	-35.5521	0.1142	2875.0284
GROUND FLOOR	SW4	Wind-X	Top	-0.089	0.095	-0.165	-0.0307	4.1447	68.6486
GROUND FLOOR	SW4	Wind-X	Bottom	-0.089	0.095	-0.165	-0.0307	2.4993	69.5993
GROUND FLOOR	SW4	Wind-Y	Top	-0.004	44.958	0.018	-7.7675	-0.2105	936.7232
GROUND FLOOR	SW4	Wind-Y	Bottom	-0.004	44.958	0.018	-7.7675	-0.0287	1386.3025
GROUND FLOOR	LW1	Dead	Top	-341.2	-4.961	-0.114	-2.9818	-4.5722	27.4345
GROUND FLOOR	LW1	Dead	Bottom	-389.077	-4.961	-0.114	-3.01	-5.7102	66.4014
GROUND FLOOR	LW1	Extra Dead	Top	-15.235	-1.857	-0.246	12.7327	-10.1924	46.9615
GROUND FLOOR	LW1	Extra Dead	Bottom	-15.235	-1.857	-0.246	12.672	-12.6511	32.1513
GROUND FLOOR	LW1	EQX1	Top	490.235	254.64	-0.067	9.6774	-2.1553	-4704.2869
GROUND FLOOR	LW1	EQX1	Bottom	490.235	254.64	-0.067	9.661	-2.8216	-2279.0208
GROUND FLOOR	LW1	EQX2	Top	490.407	254.21	-0.052	4.4294	-1.4917	-4696.8037
GROUND FLOOR	LW1	EQX2	Bottom	490.407	254.21	-0.052	4.4166	-2.0107	-2275.8755
GROUND FLOOR	LW1	EQX3	Top	490.064	255.069	-0.081	14.9254	-2.8189	-4711.7701
GROUND FLOOR	LW1	EQX3	Bottom	490.064	255.069	-0.081	14.9053	-3.6325	-2282.1661
GROUND FLOOR	LW1	EQY1	Top	-2.3	3.882	0.979	-17.2369	14.0416	-53.0875
GROUND FLOOR	LW1	EQY1	Bottom	-2.3	3.882	0.979	-16.9949	23.8349	-13.7005
GROUND FLOOR	LW1	EQY2	Top	-2.699	4.672	0.95	-9.2794	12.9863	-68.8523
GROUND FLOOR	LW1	EQY2	Bottom	-2.699	4.672	0.95	-9.0447	22.4824	-21.4643
GROUND FLOOR	LW1	EQY3	Top	-1.902	3.092	1.009	-25.1945	15.097	-37.3226
GROUND FLOOR	LW1	EQY3	Bottom	-1.902	3.092	1.009	-24.9452	25.1874	-5.9368
GROUND FLOOR	LW1	Wind-X	Top	68.405	33.219	0.019	0.987	-0.4008	-726.1981
GROUND FLOOR	LW1	Wind-X	Bottom	68.405	33.219	0.019	0.9918	-0.2083	-410.9079
GROUND FLOOR	LW1	Wind-Y	Top	-1.779	2.084	0.203	-3.2452	5.3607	-37.9607
GROUND FLOOR	LW1	Wind-Y	Bottom	-1.779	2.084	0.203	-3.1949	7.3942	-16.6859
GROUND FLOOR	LW2	Dead	Top	-350.26	3.445	0.23	-2.8298	-6.6829	38.1042

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	LW2	Dead	Bottom	-398.137	3.445	0.23	-2.8681	-4.3862	11.1892
GROUND FLOOR	LW2	Extra Dead	Top	-17.721	0.403	-0.092	12.3375	-8.3567	-8.4363
GROUND FLOOR	LW2	Extra Dead	Bottom	-17.721	0.403	-0.092	12.3528	-9.2746	-7.3645
GROUND FLOOR	LW2	EQX1	Top	-490.237	256.08	0.025	9.617	-0.7229	-4780.5184
GROUND FLOOR	LW2	EQX1	Bottom	-490.237	256.08	0.025	9.6129	-0.4722	-2301.561
GROUND FLOOR	LW2	EQX2	Top	-490.409	255.927	0.113	4.2845	-0.9528	-4780.0105
GROUND FLOOR	LW2	EQX2	Bottom	-490.409	255.927	0.113	4.2656	0.1799	-2302.6141
GROUND FLOOR	LW2	EQX3	Top	-490.065	256.233	-0.063	14.9496	-0.493	-4781.0264
GROUND FLOOR	LW2	EQX3	Bottom	-490.065	256.233	-0.063	14.9601	-1.1244	-2300.508
GROUND FLOOR	LW2	EQY1	Top	2.323	1.386	1.178	-17.7232	10.3311	-7.528
GROUND FLOOR	LW2	EQY1	Bottom	2.323	1.386	1.178	-17.9199	22.1127	6.7244
GROUND FLOOR	LW2	EQY2	Top	2.722	1.565	1.048	-9.6379	10.6452	-7.563
GROUND FLOOR	LW2	EQY2	Bottom	2.722	1.565	1.048	-9.8128	21.1239	8.5374
GROUND FLOOR	LW2	EQY3	Top	1.925	1.208	1.308	-25.8085	10.017	-7.4931
GROUND FLOOR	LW2	EQY3	Bottom	1.925	1.208	1.308	-26.0269	23.1014	4.9113
GROUND FLOOR	LW2	Wind-X	Top	-68.406	33.415	-0.018	0.9507	0.117	-735.3733
GROUND FLOOR	LW2	Wind-X	Bottom	-68.406	33.415	-0.018	0.9537	-0.058	-412.6466
GROUND FLOOR	LW2	Wind-Y	Top	1.788	0.578	0.479	-3.5355	3.2364	-6.3263
GROUND FLOOR	LW2	Wind-Y	Bottom	1.788	0.578	0.479	-3.6155	8.0271	-0.2516
GROUND FLOOR	LW3	Dead	Top	-380.271	-5.913	-0.074	-4.5197	-5.6716	15.9407
GROUND FLOOR	LW3	Dead	Bottom	-428.075	-5.913	-0.074	-4.5385	-6.4092	57.8632
GROUND FLOOR	LW3	Extra Dead	Top	-17.876	0.633	-0.104	12.2846	-5.667	-19.454
GROUND FLOOR	LW3	Extra Dead	Bottom	-17.876	0.633	-0.104	12.2582	-6.7035	-8.5835
GROUND FLOOR	LW3	EQX1	Top	482.966	256.075	-0.131	9.4249	1.5525	-4762.5996
GROUND FLOOR	LW3	EQX1	Bottom	482.966	256.075	-0.131	9.3916	0.2421	-2324.611
GROUND FLOOR	LW3	EQX2	Top	482.718	256.083	-0.181	4.297	1.5933	-4763.8876
GROUND FLOOR	LW3	EQX2	Bottom	482.718	256.083	-0.181	4.251	-0.2146	-2325.7505
GROUND FLOOR	LW3	EQX3	Top	483.215	256.066	-0.081	14.5529	1.5117	-4761.3116
GROUND FLOOR	LW3	EQX3	Bottom	483.215	256.066	-0.081	14.5322	0.6988	-2323.4714
GROUND FLOOR	LW3	EQY1	Top	2.183	-0.392	0.826	-18.0665	10.2701	14.1074
GROUND FLOOR	LW3	EQY1	Bottom	2.183	-0.392	0.826	-17.8565	18.5336	9.6295
GROUND FLOOR	LW3	EQY2	Top	2.703	-0.475	0.892	-10.2624	10.3208	17.6882
GROUND FLOOR	LW3	EQY2	Bottom	2.703	-0.475	0.892	-10.0356	19.2445	12.2545
GROUND FLOOR	LW3	EQY3	Top	1.663	-0.31	0.76	-25.8707	10.2194	10.5266
GROUND FLOOR	LW3	EQY3	Bottom	1.663	-0.31	0.76	-25.6774	17.8226	7.0046
GROUND FLOOR	LW3	Wind-X	Top	67.347	33.501	0.031	0.9963	-0.1909	-732.6225
GROUND FLOOR	LW3	Wind-X	Bottom	67.347	33.501	0.031	1.0042	0.1168	-414.7315
GROUND FLOOR	LW3	Wind-Y	Top	1.751	-0.489	0.106	-3.4738	5.1748	10.6311
GROUND FLOOR	LW3	Wind-Y	Bottom	1.751	-0.489	0.106	-3.4469	6.2311	5.2947
GROUND FLOOR	LW4	Dead	Top	-372.089	8.803	-0.109	-3.03	-4.5609	-119.7244
GROUND FLOOR	LW4	Dead	Bottom	-419.966	8.803	-0.109	-3.0118	-5.6554	-96.6993
GROUND FLOOR	LW4	Extra Dead	Top	-14.552	0.997	-0.048	12.4458	-2.9992	-24.3997
GROUND FLOOR	LW4	Extra Dead	Bottom	-14.552	0.997	-0.048	12.4538	-3.4773	-16.8604
GROUND FLOOR	LW4	EQX1	Top	-482.961	257.916	0.029	9.6736	2.3711	-4845.5718
GROUND FLOOR	LW4	EQX1	Bottom	-482.961	257.916	0.029	9.6689	2.657	-2347.041

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	LW4	EQX2	Top	-482.712	258.426	0.12	4.1217	1.2991	-4848.9931
GROUND FLOOR	LW4	EQX2	Bottom	-482.712	258.426	0.12	4.1017	2.4971	-2345.3149
GROUND FLOOR	LW4	EQX3	Top	-483.21	257.405	-0.063	15.2256	3.443	-4842.1506
GROUND FLOOR	LW4	EQX3	Bottom	-483.21	257.405	-0.063	15.2361	2.8169	-2348.7672
GROUND FLOOR	LW4	EQY1	Top	-2.154	-3.747	0.875	-17.6341	8.6211	47.8998
GROUND FLOOR	LW4	EQY1	Bottom	-2.154	-3.747	0.875	-17.7801	17.3719	10.0729
GROUND FLOOR	LW4	EQY2	Top	-2.673	-4.548	0.75	-9.2504	10.3012	55.0643
GROUND FLOOR	LW4	EQY2	Bottom	-2.673	-4.548	0.75	-9.3756	17.805	9.1361
GROUND FLOOR	LW4	EQY3	Top	-1.634	-2.945	1	-26.0177	6.9409	40.7354
GROUND FLOOR	LW4	EQY3	Bottom	-1.634	-2.945	1	-26.1847	16.9388	11.0097
GROUND FLOOR	LW4	Wind-X	Top	-67.346	33.847	-0.012	0.8059	0.6381	-743.7668
GROUND FLOOR	LW4	Wind-X	Bottom	-67.346	33.847	-0.012	0.8079	0.5169	-416.5349
GROUND FLOOR	LW4	Wind-Y	Top	-1.74	-1.933	0.472	-3.4426	2.9298	34.0926
GROUND FLOOR	LW4	Wind-Y	Bottom	-1.74	-1.933	0.472	-3.5214	7.6469	14.4765
GROUND FLOOR	SW5	Dead	Top	-410.154	9.843	0.063	-2.9471	-0.9915	-443.6778
GROUND FLOOR	SW5	Dead	Bottom	-457.615	9.843	0.063	-2.9471	-0.3651	-335.0896
GROUND FLOOR	SW5	Extra Dead	Top	-27.533	4.527	-0.026	22.163	-0.5944	105.9167
GROUND FLOOR	SW5	Extra Dead	Bottom	-27.533	4.527	-0.026	22.163	-0.857	151.1907
GROUND FLOOR	SW5	EQX1	Top	3.052E-05	29.16	-1.376	19.5167	40.6902	517.2703
GROUND FLOOR	SW5	EQX1	Bottom	3.052E-05	29.16	-1.724	22.3702	25.2377	808.8729
GROUND FLOOR	SW5	EQX2	Top	1.452E-05	13.812	-1.524	12.1646	41.4097	326.3837
GROUND FLOOR	SW5	EQX2	Bottom	1.452E-05	13.812	-1.872	15.0181	24.4768	464.5034
GROUND FLOOR	SW5	EQX3	Top	4.652E-05	44.509	-1.228	26.8687	39.9708	708.157
GROUND FLOOR	SW5	EQX3	Bottom	4.652E-05	44.509	-1.576	29.7223	25.9987	1153.2423
GROUND FLOOR	SW5	EQY1	Top	0.0001324	124.084	0.214	-25.6253	-0.9776	1518.7026
GROUND FLOOR	SW5	EQY1	Bottom	0.0001324	124.363	0.214	-25.6253	1.162	2760.8958
GROUND FLOOR	SW5	EQY2	Top	0.0001568	147.421	0.414	-14.2158	-1.9568	1825.4278
GROUND FLOOR	SW5	EQY2	Bottom	0.0001568	147.699	0.414	-14.2158	2.1786	3300.9863
GROUND FLOOR	SW5	EQY3	Top	0.000108	100.748	0.014	-37.0347	0.0016	1211.9774
GROUND FLOOR	SW5	EQY3	Bottom	0.000108	101.026	0.014	-37.0347	0.1454	2220.8054
GROUND FLOOR	SW5	Wind-X	Top	0	3.075	-0.191	3.5125	5.9913	55.8451
GROUND FLOOR	SW5	Wind-X	Bottom	0	3.075	-0.191	3.5125	4.0803	86.5913
GROUND FLOOR	SW5	Wind-Y	Top	6.139E-05	54.27	-0.141	-0.1081	0.7447	711.4345
GROUND FLOOR	SW5	Wind-Y	Bottom	6.139E-05	54.27	-0.141	-0.1081	-0.6643	1254.1394
GROUND FLOOR	SW3	Dead	Top	-639.464	16.336	-0.03	-5.2307	0.191	-548.161
GROUND FLOOR	SW3	Dead	Bottom	-677.597	16.336	-0.03	-5.2307	-0.1117	-375.1448
GROUND FLOOR	SW3	Extra Dead	Top	-61.834	-18.044	0.009	12.771	-0.0475	-678.1601
GROUND FLOOR	SW3	Extra Dead	Bottom	-61.834	-18.044	0.009	12.771	0.0452	-858.6014
GROUND FLOOR	SW3	EQX1	Top	-0.005	-2.595	-0.963	8.9707	23.0634	15.2241
GROUND FLOOR	SW3	EQX1	Bottom	-0.005	-2.595	-0.963	8.9707	13.4284	-10.7238
GROUND FLOOR	SW3	EQX2	Top	-0.005	-1.539	-0.958	2.3634	23.0277	16.379
GROUND FLOOR	SW3	EQX2	Bottom	-0.005	-1.539	-0.958	2.3634	13.4481	0.9844
GROUND FLOOR	SW3	EQX3	Top	-0.004	-3.65	-0.969	15.578	23.0991	14.0691
GROUND FLOOR	SW3	EQX3	Bottom	-0.004	-3.65	-0.969	15.578	13.4087	-22.432
GROUND FLOOR	SW3	EQY1	Top	-0.046	104.143	-0.071	-20.8901	0.3867	1636.1341



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
GROUND FLOOR	SW3	EQY1	Bottom	-0.046	104.143	-0.071	-20.8901	-0.3271	2677.5609
GROUND FLOOR	SW3	EQY2	Top	-0.045	102.342	-0.077	-10.9916	0.4237	1638.9626
GROUND FLOOR	SW3	EQY2	Bottom	-0.045	102.342	-0.077	-10.9916	-0.3488	2662.3807
GROUND FLOOR	SW3	EQY3	Top	-0.048	105.944	-0.066	-30.7886	0.3498	1633.3055
GROUND FLOOR	SW3	EQY3	Bottom	-0.048	105.944	-0.066	-30.7886	-0.3055	2692.7412
GROUND FLOOR	SW3	Wind-X	Top	-0.001	-0.279	-0.131	0.4831	3.6422	3.1945
GROUND FLOOR	SW3	Wind-X	Bottom	-0.001	-0.279	-0.131	0.4831	2.3329	0.4074
GROUND FLOOR	SW3	Wind-Y	Top	-0.015	35.232	-0.017	-6.503	0.0935	626.1862
GROUND FLOOR	SW3	Wind-Y	Bottom	-0.015	35.232	-0.017	-6.503	-0.081	978.5041
BASEMENT	WP1	Dead	Top	-185.614	12.014	-0.008	-0.4812	-0.0271	-33.4898
BASEMENT	WP1	Dead	Bottom	-194.489	12.014	-0.008	-0.4812	-0.1035	87.2745
BASEMENT	WP1	Extra Dead	Top	-7.783	-0.487	-0.022	1.3658	0.7664	-65.7228
BASEMENT	WP1	Extra Dead	Bottom	-7.783	-0.487	-0.022	1.3658	0.5452	-70.597
BASEMENT	WP1	EQX1	Top	-0.003	-0.313	-0.25	1.0466	2.865	-21.3439
BASEMENT	WP1	EQX1	Bottom	-0.003	-0.313	-0.25	1.0466	0.3619	-24.4726
BASEMENT	WP1	EQX2	Top	-0.002	-0.013	-0.253	0.3804	2.7556	-13.8293
BASEMENT	WP1	EQX2	Bottom	-0.002	-0.013	-0.253	0.3804	0.2297	-13.9577
BASEMENT	WP1	EQX3	Top	-0.005	-0.613	-0.248	1.7129	2.9743	-28.8585
BASEMENT	WP1	EQX3	Bottom	-0.005	-0.613	-0.248	1.7129	0.4942	-34.9875
BASEMENT	WP1	EQY1	Top	0.024	3.829	0.005	-2.1449	-0.6499	118.5196
BASEMENT	WP1	EQY1	Bottom	0.024	3.829	0.005	-2.1449	-0.5977	156.805
BASEMENT	WP1	EQY2	Top	0.021	3.391	0.007	-1.1432	-0.4632	106.3906
BASEMENT	WP1	EQY2	Bottom	0.021	3.391	0.007	-1.1432	-0.3892	140.2999
BASEMENT	WP1	EQY3	Top	0.026	4.266	0.003	-3.1465	-0.8365	130.6487
BASEMENT	WP1	EQY3	Bottom	0.026	4.266	0.003	-3.1465	-0.8062	173.3101
BASEMENT	WP1	Wind-X	Top	-0.0003211	-0.018	-0.037	0.0693	0.4805	-2.4311
BASEMENT	WP1	Wind-X	Bottom	-0.0003211	-0.018	-0.037	0.0693	0.1145	-2.6158
BASEMENT	WP1	Wind-Y	Top	0.008	1.242	-0.004	-0.5018	-0.0732	36.02
BASEMENT	WP1	Wind-Y	Bottom	0.008	1.242	-0.004	-0.5018	-0.1099	48.4426
BASEMENT	WP3	Dead	Top	-372.598	-2.835	0.039	-1.6053	-0.3076	-352.2652
BASEMENT	WP3	Dead	Bottom	-405.067	-2.835	0.039	-1.6053	0.0857	-380.6133
BASEMENT	WP3	Extra Dead	Top	-628.373	-30.388	-0.015	5.4483	-1.6142	-1305.6096
BASEMENT	WP3	Extra Dead	Bottom	-628.373	-30.388	-0.015	5.4483	-1.7652	-1609.4895
BASEMENT	WP3	EQX1	Top	1.312E-05	-12.831	-0.498	4.3842	5.4005	-427.7055
BASEMENT	WP3	EQX1	Bottom	1.312E-05	-12.831	-0.498	4.3842	0.421	-556.0175
BASEMENT	WP3	EQX2	Top	6.485E-06	-3.789	-0.471	1.9143	5.4922	-275.785
BASEMENT	WP3	EQX2	Bottom	6.484E-06	-3.789	-0.471	1.9143	0.7845	-313.6763
BASEMENT	WP3	EQX3	Top	1.975E-05	-21.873	-0.525	6.8541	5.3089	-579.626
BASEMENT	WP3	EQX3	Bottom	1.975E-05	-21.873	-0.525	6.8541	0.0574	-798.3587
BASEMENT	WP3	EQY1	Top	-9.226E-05	120.009	0.051	-8.0612	0.6756	2374.5439
BASEMENT	WP3	EQY1	Bottom	-9.225E-05	120.009	0.051	-8.0612	1.1843	3574.6353
BASEMENT	WP3	EQY2	Top	-8.209E-05	106.703	0.011	-4.3318	0.4914	2128.294
BASEMENT	WP3	EQY2	Bottom	-8.209E-05	106.703	0.011	-4.3318	0.6036	3195.3242
BASEMENT	WP3	EQY3	Top	-0.0001024	133.315	0.091	-11.7905	0.8597	2620.7938
BASEMENT	WP3	EQY3	Bottom	-0.0001024	133.315	0.091	-11.7905	1.765	3953.9464

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
BASEMENT	WP3	Wind-X	Top	0	-1.102	-0.042	0.4011	0.9745	-47.5288
BASEMENT	WP3	Wind-X	Bottom	0	-1.102	-0.042	0.4011	0.5534	-58.5453
BASEMENT	WP3	Wind-Y	Top	-3.086E-05	39.059	0.011	-1.5492	-0.1536	727.7647
BASEMENT	WP3	Wind-Y	Bottom	-3.085E-05	39.059	0.011	-1.5492	-0.0396	1118.3588
BASEMENT	WP4	Dead	Top	-94.534	-3.151	0.005	-0.4713	0.0217	-6.7551
BASEMENT	WP4	Dead	Bottom	-103.265	-3.151	0.005	-0.4713	0.0682	-38.6273
BASEMENT	WP4	Extra Dead	Top	-122.786	-4.724	0.005	1.3239	-0.6121	-50.192
BASEMENT	WP4	Extra Dead	Bottom	-122.786	-4.724	0.005	1.3239	-0.5639	-97.4343
BASEMENT	WP4	EQX1	Top	0.009	-0.419	-0.082	1.0452	1.0836	-19.4645
BASEMENT	WP4	EQX1	Bottom	0.009	-0.419	-0.082	1.0452	0.2655	-23.6501
BASEMENT	WP4	EQX2	Top	0.004	-0.124	-0.081	0.3772	1.2003	-12.5188
BASEMENT	WP4	EQX2	Bottom	0.004	-0.124	-0.081	0.3772	0.3913	-13.754
BASEMENT	WP4	EQX3	Top	0.013	-0.714	-0.083	1.7132	0.9669	-26.4102
BASEMENT	WP4	EQX3	Bottom	0.013	-0.714	-0.083	1.7132	0.1397	-33.5461
BASEMENT	WP4	EQY1	Top	-0.063	3.915	-0.01	-2.0541	0.5976	109.31
BASEMENT	WP4	EQY1	Bottom	-0.063	3.915	-0.01	-2.0541	0.4998	148.4636
BASEMENT	WP4	EQY2	Top	-0.056	3.481	-0.011	-1.0512	0.4067	98.066
BASEMENT	WP4	EQY2	Bottom	-0.056	3.481	-0.011	-1.0512	0.3002	132.8718
BASEMENT	WP4	EQY3	Top	-0.07	4.35	-0.009	-3.0571	0.7885	120.5541
BASEMENT	WP4	EQY3	Bottom	-0.07	4.35	-0.009	-3.0571	0.6995	164.0554
BASEMENT	WP4	Wind-X	Top	0.001	-0.034	-0.01	0.0518	0.2248	-2.1829
BASEMENT	WP4	Wind-X	Bottom	0.001	-0.034	-0.01	0.0518	0.1257	-2.5191
BASEMENT	WP4	Wind-Y	Top	-0.021	1.244	-0.002	-0.4809	0.0964	33.2151
BASEMENT	WP4	Wind-Y	Bottom	-0.021	1.244	-0.002	-0.4809	0.0718	45.653
BASEMENT	WP5	Dead	Top	-201.723	-16.133	0.039	-0.8951	-0.0943	16.3098
BASEMENT	WP5	Dead	Bottom	-214.567	-16.133	0.039	-0.8951	0.2985	-145.6717
BASEMENT	WP5	Extra Dead	Top	-8.168	0.107	-0.014	3.2561	-1.344	3.5333
BASEMENT	WP5	Extra Dead	Bottom	-8.168	0.107	-0.014	3.2561	-1.4881	4.6054
BASEMENT	WP5	EQX1	Top	-0.004	0.573	-0.31	2.4947	2.8577	25.7633
BASEMENT	WP5	EQX1	Bottom	-0.004	0.573	-0.31	2.4947	-0.2397	31.4901
BASEMENT	WP5	EQX2	Top	-0.002	0.087	-0.288	0.9227	3.0509	16.8758
BASEMENT	WP5	EQX2	Bottom	-0.002	0.087	-0.288	0.9227	0.1684	17.7433
BASEMENT	WP5	EQX3	Top	-0.006	1.059	-0.331	4.0667	2.6644	34.6507
BASEMENT	WP5	EQX3	Bottom	-0.006	1.059	-0.331	4.0667	-0.6478	45.2369
BASEMENT	WP5	EQY1	Top	-0.018	4.029	0.031	-4.9857	0.874	69.3942
BASEMENT	WP5	EQY1	Bottom	-0.018	4.029	0.031	-4.9857	1.1845	109.6882
BASEMENT	WP5	EQY2	Top	-0.021	4.737	0.001	-2.6206	0.54	83.878
BASEMENT	WP5	EQY2	Bottom	-0.021	4.737	0.001	-2.6206	0.5478	131.2479
BASEMENT	WP5	EQY3	Top	-0.015	3.322	0.061	-7.3509	1.208	54.9105
BASEMENT	WP5	EQY3	Bottom	-0.015	3.322	0.061	-7.3509	1.8211	88.1286
BASEMENT	WP5	Wind-X	Top	-0.0004148	0.043	-0.033	0.1707	0.5011	2.7574
BASEMENT	WP5	Wind-X	Bottom	-0.0004148	0.043	-0.033	0.1707	0.1679	3.1919
BASEMENT	WP5	Wind-Y	Top	-0.008	1.651	0.013	-1.1361	-0.0052	31.7219
BASEMENT	WP5	Wind-Y	Bottom	-0.008	1.651	0.013	-1.1361	0.1203	48.2333
BASEMENT	WP6	Dead	Top	-219.877	-9.407	-0.252	-2.7308	2.1675	-343.2281

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
BASEMENT	WP6	Dead	Bottom	-253.158	-9.407	-0.252	-2.7308	-0.351	-437.2973
BASEMENT	WP6	Extra Dead	Top	-30.258	1.112	-0.02	8.7266	2.1503	48.7857
BASEMENT	WP6	Extra Dead	Bottom	-30.258	1.112	-0.02	8.7266	1.9522	59.9061
BASEMENT	WP6	EQX1	Top	-2.967E-05	6.166	-0.889	7.3657	14.8339	274.6454
BASEMENT	WP6	EQX1	Bottom	-2.967E-05	6.166	-1.221	7.5107	4.2849	336.3024
BASEMENT	WP6	EQX2	Top	-1.4E-05	1.686	-0.967	3.3759	15.0676	175.6832
BASEMENT	WP6	EQX2	Bottom	-1.4E-05	1.686	-1.299	3.521	3.7367	192.5437
BASEMENT	WP6	EQX3	Top	-4.535E-05	10.645	-0.811	11.3554	14.6002	373.6076
BASEMENT	WP6	EQX3	Bottom	-4.535E-05	10.645	-1.142	11.5005	4.833	480.0611
BASEMENT	WP6	EQY1	Top	-0.0001299	37.725	-0.067	-12.618	0.7814	774.9411
BASEMENT	WP6	EQY1	Bottom	-0.0001299	37.99	-0.067	-12.618	0.1065	1153.5176
BASEMENT	WP6	EQY2	Top	-0.0001537	44.287	0.04	-6.5953	0.5454	934.303
BASEMENT	WP6	EQY2	Bottom	-0.0001537	44.552	0.04	-6.5953	0.9487	1378.4983
BASEMENT	WP6	EQY3	Top	-0.000106	31.163	-0.175	-18.6407	1.0174	615.5792
BASEMENT	WP6	EQY3	Bottom	-0.000106	31.428	-0.175	-18.6407	-0.7356	928.537
BASEMENT	WP6	Wind-X	Top	0	0.676	-0.187	0.8066	3.2303	31.1807
BASEMENT	WP6	Wind-X	Bottom	0	0.676	-0.187	0.8066	1.3621	37.9377
BASEMENT	WP6	Wind-Y	Top	-6.018E-05	15.839	-0.076	-2.1176	1.3155	350.436
BASEMENT	WP6	Wind-Y	Bottom	-6.018E-05	15.839	-0.076	-2.1176	0.557	508.8253
BASEMENT	SW1	Dead	Top	-610.65	-18.762	0.087	-3.0812	-0.7046	-478.9806
BASEMENT	SW1	Dead	Bottom	-656.066	-18.762	0.087	-3.0812	0.1648	-666.5969
BASEMENT	SW1	Extra Dead	Top	-312.962	-6.125	-0.025	13.7663	0.5821	-2251.8199
BASEMENT	SW1	Extra Dead	Bottom	-312.962	-6.125	-0.025	13.7663	0.3368	-2313.0725
BASEMENT	SW1	EQX1	Top	3.876E-05	-18.072	-1.413	11.6744	17.8788	-669.11
BASEMENT	SW1	EQX1	Bottom	3.876E-05	-18.072	-1.413	11.6744	3.7469	-849.8311
BASEMENT	SW1	EQX2	Top	1.88E-05	-5.474	-1.415	5.7815	17.8756	-420.5455
BASEMENT	SW1	EQX2	Bottom	1.88E-05	-5.474	-1.415	5.7815	3.725	-475.2875
BASEMENT	SW1	EQX3	Top	5.871E-05	-30.67	-1.411	17.5673	17.882	-917.6744
BASEMENT	SW1	EQX3	Bottom	5.871E-05	-30.67	-1.411	17.5673	3.7689	-1224.3747
BASEMENT	SW1	EQY1	Top	-0.000276	167.921	0.092	-19.0157	-1.1876	3833.3082
BASEMENT	SW1	EQY1	Bottom	-0.000276	167.921	0.092	-19.0157	-0.2685	5512.5161
BASEMENT	SW1	EQY2	Top	-0.0002455	149.316	0.094	-10.0876	-1.1619	3433.8613
BASEMENT	SW1	EQY2	Bottom	-0.0002455	149.316	0.094	-10.0876	-0.2242	4927.0249
BASEMENT	SW1	EQY3	Top	-0.0003064	186.525	0.09	-27.9438	-1.2132	4232.7551
BASEMENT	SW1	EQY3	Bottom	-0.0003064	186.525	0.09	-27.9438	-0.3128	6098.0073
BASEMENT	SW1	Wind-X	Top	0	-1.369	-0.187	1.514	3.0893	-76.5018
BASEMENT	SW1	Wind-X	Bottom	0	-1.369	-0.187	1.514	1.2228	-90.1958
BASEMENT	SW1	Wind-Y	Top	-9.235E-05	54.851	0.021	-2.7191	-0.1955	1180.5013
BASEMENT	SW1	Wind-Y	Bottom	-9.235E-05	54.851	0.021	-2.7191	0.0131	1729.0133
BASEMENT	SW2	Dead	Top	-977.764	7.158	0.057	-3.2847	-0.5075	-871.1496
BASEMENT	SW2	Dead	Bottom	-1018.564	7.158	0.057	-3.2847	0.06	-798.7666
BASEMENT	SW2	Extra Dead	Top	-706.84	65.851	-0.015	12.0565	0.1037	-3089.3989
BASEMENT	SW2	Extra Dead	Bottom	-706.84	65.851	-0.015	12.0565	-0.042	-2430.8862
BASEMENT	SW2	EQX1	Top	0.872	-17.829	-1.094	8.943	13.1189	-611.7931
BASEMENT	SW2	EQX1	Bottom	0.872	-17.829	-1.094	8.943	2.1816	-790.0835

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
BASEMENT	SW2	EQX2	Top	0.872	-6.385	-1.092	3.3524	13.1297	-355.2819
BASEMENT	SW2	EQX2	Bottom	0.872	-6.385	-1.092	3.3524	2.2067	-419.1277
BASEMENT	SW2	EQX3	Top	0.872	-29.274	-1.095	14.5336	13.108	-868.3042
BASEMENT	SW2	EQX3	Bottom	0.872	-29.274	-1.095	14.5336	2.1565	-1161.0394
BASEMENT	SW2	EQY1	Top	-0.001	197.923	0.042	-18.8627	-0.6186	4999.5687
BASEMENT	SW2	EQY1	Bottom	-0.001	197.923	0.042	-18.8627	-0.1947	6978.7991
BASEMENT	SW2	EQY2	Top	-0.002	180.771	0.039	-10.4408	-0.6237	4598.6939
BASEMENT	SW2	EQY2	Bottom	-0.002	180.771	0.039	-10.4408	-0.2322	6406.4064
BASEMENT	SW2	EQY3	Top	-0.001	215.075	0.046	-27.2847	-0.6136	5400.4435
BASEMENT	SW2	EQY3	Bottom	-0.001	215.075	0.046	-27.2847	-0.1571	7551.1917
BASEMENT	SW2	Wind-X	Top	0.123	-1.77	-0.134	0.6542	2.2374	-62.7815
BASEMENT	SW2	Wind-X	Bottom	0.123	-1.77	-0.134	0.6542	0.9009	-80.4821
BASEMENT	SW2	Wind-Y	Top	-0.002	67.167	0.001	-4.3243	-0.1195	1655.9511
BASEMENT	SW2	Wind-Y	Bottom	-0.002	67.167	0.001	-4.3243	-0.1134	2327.6182
BASEMENT	SW4	Dead	Top	-938.437	6.34	-0.013	-3.4425	0.2545	-1103.4085
BASEMENT	SW4	Dead	Bottom	-982.404	6.34	-0.013	-3.4425	0.1235	-1037.3378
BASEMENT	SW4	Extra Dead	Top	-80.289	-11.556	-0.023	12.7203	0.1422	-267.2019
BASEMENT	SW4	Extra Dead	Bottom	-80.289	-11.556	-0.023	12.7203	-0.0904	-382.7609
BASEMENT	SW4	EQX1	Top	-0.838	8.911	-1.262	9.1767	15.3066	648.4025
BASEMENT	SW4	EQX1	Bottom	-0.838	8.911	-1.262	9.1767	2.6865	737.509
BASEMENT	SW4	EQX2	Top	-0.838	-0.287	-1.221	3.9416	14.9631	416.1956
BASEMENT	SW4	EQX2	Bottom	-0.838	-0.287	-1.221	3.9416	2.756	413.329
BASEMENT	SW4	EQX3	Top	-0.839	18.108	-1.303	14.4118	15.65	880.6093
BASEMENT	SW4	EQX3	Bottom	-0.839	18.108	-1.303	14.4118	2.617	1061.689
BASEMENT	SW4	EQY1	Top	-0.009	133.423	-0.032	-20.081	0.599	3247.5438
BASEMENT	SW4	EQY1	Bottom	-0.009	133.423	-0.032	-20.081	0.2743	4581.7786
BASEMENT	SW4	EQY2	Top	-0.01	146.8	-0.091	-12.1121	1.0832	3620.0598
BASEMENT	SW4	EQY2	Bottom	-0.01	146.8	-0.091	-12.1121	0.1724	5088.0611
BASEMENT	SW4	EQY3	Top	-0.007	120.047	0.026	-28.0499	0.1148	2875.0278
BASEMENT	SW4	EQY3	Bottom	-0.007	120.047	0.026	-28.0499	0.3761	4075.4961
BASEMENT	SW4	Wind-X	Top	-0.118	0.33	-0.139	0.983	2.5139	69.5993
BASEMENT	SW4	Wind-X	Bottom	-0.118	0.33	-0.139	0.983	1.1252	72.9025
BASEMENT	SW4	Wind-Y	Top	-0.005	52.958	0.021	-3.4943	-0.0283	1386.3022
BASEMENT	SW4	Wind-Y	Bottom	-0.005	52.958	0.021	-3.4943	0.1782	1915.8818
BASEMENT	LW1	Dead	Top	-444.028	-5.103	0.034	-3.341	-5.7102	-6.965
BASEMENT	LW1	Dead	Bottom	-491.905	-5.103	0.034	-3.3326	-5.3692	55.996
BASEMENT	LW1	Extra Dead	Top	-15.379	-0.855	-0.166	10.9605	-12.6511	25.9386
BASEMENT	LW1	Extra Dead	Bottom	-15.379	-0.855	-0.166	10.9195	-14.3106	21.1882
BASEMENT	LW1	EQX1	Top	490.012	303.216	-0.088	8.8601	-2.8216	-2161.8587
BASEMENT	LW1	EQX1	Bottom	490.012	303.216	-0.088	8.8382	-3.7061	749.2311
BASEMENT	LW1	EQX2	Top	490.184	302.979	-0.014	3.8135	-2.0107	-2158.6702
BASEMENT	LW1	EQX2	Bottom	490.184	302.979	-0.014	3.8101	-2.1502	750.0079
BASEMENT	LW1	EQX3	Top	489.84	303.453	-0.163	13.9067	-3.6325	-2165.0471
BASEMENT	LW1	EQX3	Bottom	489.84	303.453	-0.163	13.8664	-5.262	748.4543
BASEMENT	LW1	EQY1	Top	-2.299	1.228	1.153	-16.8294	23.8348	-14.2428

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
BASEMENT	LW1	EQY1	Bottom	-2.299	1.228	1.153	-16.5446	35.364	-1.3904
BASEMENT	LW1	EQY2	Top	-2.697	1.691	1.045	-9.2131	22.4823	-22.1055
BASEMENT	LW1	EQY2	Bottom	-2.697	1.691	1.045	-8.955	32.9297	-4.5323
BASEMENT	LW1	EQY3	Top	-1.9	0.766	1.261	-24.4457	25.1873	-6.38
BASEMENT	LW1	EQY3	Bottom	-1.9	0.766	1.261	-24.1341	37.7982	1.7515
BASEMENT	LW1	Wind-X	Top	68.374	41.495	-0.006	0.816	-0.2083	-394.5701
BASEMENT	LW1	Wind-X	Bottom	68.374	41.495	-0.006	0.8144	-0.2714	3.4901
BASEMENT	LW1	Wind-Y	Top	-1.778	1.157	0.391	-3.3892	7.3942	-17.1139
BASEMENT	LW1	Wind-Y	Bottom	-1.778	1.157	0.391	-3.2927	11.303	-5.1025
BASEMENT	LW2	Dead	Top	-453.05	2.978	-0.154	-3.1487	-4.3863	53.4796
BASEMENT	LW2	Dead	Bottom	-500.927	2.978	-0.154	-3.123	-5.9297	4.7392
BASEMENT	LW2	Extra Dead	Top	-17.73	0.347	-0.158	11.0318	-9.2746	-4.2468
BASEMENT	LW2	Extra Dead	Bottom	-17.73	0.347	-0.158	11.0582	-10.8558	-3.7375
BASEMENT	LW2	EQX1	Top	-490.014	304.15	-0.089	8.8402	-0.4722	-2223.6864
BASEMENT	LW2	EQX1	Bottom	-490.014	304.15	-0.089	8.8551	-1.3671	736.004
BASEMENT	LW2	EQX2	Top	-490.185	304.131	-0.094	3.8834	0.1799	-2224.7115
BASEMENT	LW2	EQX2	Bottom	-490.185	304.131	-0.094	3.8991	-0.7588	734.7656
BASEMENT	LW2	EQX3	Top	-489.842	304.168	-0.085	13.797	-1.1244	-2222.6613
BASEMENT	LW2	EQX3	Bottom	-489.842	304.168	-0.085	13.8112	-1.9754	737.2424
BASEMENT	LW2	EQY1	Top	2.332	0.241	1.054	-16.2973	22.1126	6.1888
BASEMENT	LW2	EQY1	Bottom	2.332	0.241	1.054	-16.4733	32.6566	8.9911
BASEMENT	LW2	EQY2	Top	2.731	0.254	1.058	-8.8129	21.1238	7.9365
BASEMENT	LW2	EQY2	Bottom	2.731	0.254	1.058	-8.9894	31.699	10.9308
BASEMENT	LW2	EQY3	Top	1.933	0.229	1.051	-23.7817	23.1013	4.4411
BASEMENT	LW2	EQY3	Bottom	1.933	0.229	1.051	-23.9572	33.6143	7.0514
BASEMENT	LW2	Wind-X	Top	-68.374	41.695	-0.017	0.8431	-0.058	-401.7892
BASEMENT	LW2	Wind-X	Bottom	-68.374	41.695	-0.017	0.8459	-0.2267	3.7483
BASEMENT	LW2	Wind-Y	Top	1.791	0.347	0.308	-3.057	8.0271	-0.6054
BASEMENT	LW2	Wind-Y	Bottom	1.791	0.347	0.308	-3.1084	11.1081	3.1678
BASEMENT	LW3	Dead	Top	-482.701	-5.151	0.031	-2.8016	-6.4093	-31.0056
BASEMENT	LW3	Dead	Bottom	-530.505	-5.151	0.031	-2.7937	-6.0989	44.5728
BASEMENT	LW3	Extra Dead	Top	-17.885	0.55	-0.04	11.2127	-6.7035	-13.2875
BASEMENT	LW3	Extra Dead	Bottom	-17.885	0.55	-0.04	11.2024	-7.107	-3.2416
BASEMENT	LW3	EQX1	Top	482.748	303.423	0.029	8.8838	0.2421	-2205.8423
BASEMENT	LW3	EQX1	Bottom	482.748	303.423	0.029	8.8911	0.529	705.6841
BASEMENT	LW3	EQX2	Top	482.499	303.502	0.061	3.8384	-0.2146	-2207.0436
BASEMENT	LW3	EQX2	Bottom	482.499	303.502	0.061	3.8538	0.3933	705.3376
BASEMENT	LW3	EQX3	Top	482.997	303.344	-0.003	13.9293	0.6988	-2204.6411
BASEMENT	LW3	EQX3	Bottom	482.997	303.344	-0.003	13.9284	0.6647	706.0306
BASEMENT	LW3	EQY1	Top	2.192	-0.865	0.829	-17.5102	18.5334	10.3329
BASEMENT	LW3	EQY1	Bottom	2.192	-0.865	0.829	-17.2996	26.8214	1.1219
BASEMENT	LW3	EQY2	Top	2.711	-1.014	0.782	-9.9042	19.2444	13.0874
BASEMENT	LW3	EQY2	Bottom	2.711	-1.014	0.782	-9.7055	27.0623	2.2551
BASEMENT	LW3	EQY3	Top	1.672	-0.716	0.876	-25.1162	17.8225	7.5784
BASEMENT	LW3	EQY3	Bottom	1.672	-0.716	0.876	-24.8936	26.5805	-0.0113

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
BASEMENT	LW3	Wind-X	Top	67.316	41.618	-0.005	0.7917	0.1168	-398.1795
BASEMENT	LW3	Wind-X	Bottom	67.316	41.618	-0.005	0.7904	0.0637	0.8862
BASEMENT	LW3	Wind-Y	Top	1.754	-0.372	0.341	-3.5663	6.2311	5.7947
BASEMENT	LW3	Wind-Y	Bottom	1.754	-0.372	0.341	-3.4795	9.6449	1.6298
BASEMENT	LW4	Dead	Top	-475.318	6.777	-0.124	-3.6422	-5.6554	-58.1658
BASEMENT	LW4	Dead	Bottom	-523.195	6.777	-0.124	-3.6216	-6.8914	-72.6354
BASEMENT	LW4	Extra Dead	Top	-14.563	0.819	-0.014	10.781	-3.4773	-14.2365
BASEMENT	LW4	Extra Dead	Bottom	-14.563	0.819	-0.014	10.7833	-3.619	-8.4827
BASEMENT	LW4	EQX1	Top	-482.767	306.003	0.03	8.7841	2.657	-2269.959
BASEMENT	LW4	EQX1	Bottom	-482.767	306.003	0.03	8.7791	2.9545	709.4781
BASEMENT	LW4	EQX2	Top	-482.519	306.016	-0.078	3.8689	2.4971	-2268.2722
BASEMENT	LW4	EQX2	Bottom	-482.519	306.016	-0.078	3.882	1.7132	711.3302
BASEMENT	LW4	EQX3	Top	-483.016	305.991	0.138	13.6993	2.8169	-2271.6459
BASEMENT	LW4	EQX3	Bottom	-483.016	305.991	0.138	13.6762	4.1958	707.626
BASEMENT	LW4	EQY1	Top	-2.152	-2.141	0.672	-15.9681	17.3718	10.4075
BASEMENT	LW4	EQY1	Bottom	-2.152	-2.141	0.672	-16.0804	24.0954	-11.3667
BASEMENT	LW4	EQY2	Top	-2.671	-2.207	0.823	-8.5342	17.8049	9.5537
BASEMENT	LW4	EQY2	Bottom	-2.671	-2.207	0.823	-8.6715	26.032	-12.9646
BASEMENT	LW4	EQY3	Top	-1.633	-2.076	0.522	-23.4021	16.9387	11.2612
BASEMENT	LW4	EQY3	Bottom	-1.633	-2.076	0.522	-23.4892	22.1588	-9.7689
BASEMENT	LW4	Wind-X	Top	-67.319	41.943	-0.02	0.8809	0.5169	-405.7945
BASEMENT	LW4	Wind-X	Bottom	-67.319	41.943	-0.02	0.8842	0.3198	2.3987
BASEMENT	LW4	Wind-Y	Top	-1.739	-1.444	0.156	-2.7924	7.6469	14.7537
BASEMENT	LW4	Wind-Y	Bottom	-1.739	-1.444	0.156	-2.8183	9.2033	0.0228
BASEMENT	SW5	Dead	Top	-554.429	20.842	0.08	-7.8009	-0.3651	-2096.9057
BASEMENT	SW5	Dead	Bottom	-609.449	20.842	0.08	-7.8667	0.4368	-2401.226
BASEMENT	SW5	Extra Dead	Top	-31.226	6.349	0.029	22.7661	-0.857	90.9059
BASEMENT	SW5	Extra Dead	Bottom	-31.226	6.349	0.029	22.742	-0.563	128.7651
BASEMENT	SW5	EQX1	Top	4.146E-05	36.174	-1.836	27.0447	25.2377	808.8728
BASEMENT	SW5	EQX1	Bottom	4.146E-05	36.174	-2.075	31.4317	5.5887	1170.6083
BASEMENT	SW5	EQX2	Top	1.946E-05	15.976	-1.745	16.6349	24.4768	464.5034
BASEMENT	SW5	EQX2	Bottom	1.946E-05	15.976	-1.983	20.9469	5.7421	624.2617
BASEMENT	SW5	EQX3	Top	6.346E-05	56.371	-1.927	37.4545	25.9987	1153.2422
BASEMENT	SW5	EQX3	Bottom	6.346E-05	56.371	-2.166	41.9166	5.4353	1716.955
BASEMENT	SW5	EQY1	Top	0.0001823	167.407	-0.034	-31.2285	1.162	2760.8954
BASEMENT	SW5	EQY1	Bottom	0.0001823	167.598	-0.034	-31.2003	0.8182	4435.9989
BASEMENT	SW5	EQY2	Top	0.0002158	197.883	-0.16	-15.5399	2.1786	3300.9858
BASEMENT	SW5	EQY2	Bottom	0.0002158	198.074	-0.16	-15.4086	0.5784	5280.8471
BASEMENT	SW5	EQY3	Top	0.0001488	136.931	0.091	-46.9171	0.1454	2220.805
BASEMENT	SW5	EQY3	Bottom	0.0001488	137.122	0.091	-46.992	1.058	3591.1507
BASEMENT	SW5	Wind-X	Top	0	3.738	-0.202	3.7718	4.0803	86.5913
BASEMENT	SW5	Wind-X	Bottom	0	3.738	-0.202	3.9372	2.065	123.9663
BASEMENT	SW5	Wind-Y	Top	8.447E-05	74.311	0.091	-4.4065	-0.6643	1254.1392
BASEMENT	SW5	Wind-Y	Bottom	8.447E-05	74.311	0.091	-4.4811	0.2455	1997.2466
BASEMENT	SW3	Dead	Top	-819.119	10.636	0.022	-2.7242	-0.1958	-447.7653

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
BASEMENT	SW3	Dead	Bottom	-857.252	10.636	0.022	-2.7242	0.0241	-329.2283
BASEMENT	SW3	Extra Dead	Top	-61.815	-14.934	-0.006	11.5546	0.0452	-858.6013
BASEMENT	SW3	Extra Dead	Bottom	-61.815	-14.934	-0.006	11.5546	-0.0172	-1007.9394
BASEMENT	SW3	EQX1	Top	-0.006	-2.835	-1.116	8.4669	13.6618	-10.7238
BASEMENT	SW3	EQX1	Bottom	-0.006	-2.835	-1.116	8.4669	2.4988	-39.0718
BASEMENT	SW3	EQX2	Top	-0.007	-1.706	-1.119	3.3348	13.6815	0.9844
BASEMENT	SW3	EQX2	Bottom	-0.007	-1.706	-1.119	3.3348	2.4933	-16.0806
BASEMENT	SW3	EQX3	Top	-0.005	-3.963	-1.114	13.599	13.6421	-22.432
BASEMENT	SW3	EQX3	Bottom	-0.005	-3.963	-1.114	13.599	2.5043	-62.0629
BASEMENT	SW3	EQY1	Top	-0.064	118.361	0.032	-17.8308	-0.3272	2677.5606
BASEMENT	SW3	EQY1	Bottom	-0.064	118.361	0.032	-17.8308	-0.0112	3861.1681
BASEMENT	SW3	EQY2	Top	-0.062	116.517	0.035	-10.0816	-0.3488	2662.3804
BASEMENT	SW3	EQY2	Bottom	-0.062	116.517	0.035	-10.0816	-0.0026	3827.5467
BASEMENT	SW3	EQY3	Top	-0.065	120.205	0.029	-25.58	-0.3055	2692.7408
BASEMENT	SW3	EQY3	Bottom	-0.065	120.205	0.029	-25.58	-0.0199	3894.7894
BASEMENT	SW3	Wind-X	Top	-0.001	-0.452	-0.139	0.6706	2.366	0.4074
BASEMENT	SW3	Wind-X	Bottom	-0.001	-0.452	-0.139	0.6706	0.9717	-4.112
BASEMENT	SW3	Wind-Y	Top	-0.021	41.856	0.007	-3.787	-0.081	978.504
BASEMENT	SW3	Wind-Y	Bottom	-0.021	41.856	0.007	-3.787	-0.0106	1397.068
SUB LVL-1	WP1	Dead	Top	-231.055	13.362	-0.002	-0.3901	-0.1035	-43.9925
SUB LVL-1	WP1	Dead	Bottom	-239.93	13.362	-0.002	-0.3901	-0.127	90.2565
SUB LVL-1	WP1	Extra Dead	Top	-7.785	-0.77	0.015	1.1867	0.5452	-70.5897
SUB LVL-1	WP1	Extra Dead	Bottom	-7.785	-0.77	0.015	1.1867	0.6957	-78.2928
SUB LVL-1	WP1	EQX1	Top	-0.004	-0.516	-0.092	0.9716	0.3619	-24.469
SUB LVL-1	WP1	EQX1	Bottom	-0.004	-0.516	-0.092	0.9716	-0.5551	-29.6256
SUB LVL-1	WP1	EQX2	Top	-0.002	-0.102	-0.1	0.3649	0.2297	-13.9562
SUB LVL-1	WP1	EQX2	Bottom	-0.002	-0.102	-0.1	0.3649	-0.7716	-14.9789
SUB LVL-1	WP1	EQX3	Top	-0.006	-0.929	-0.083	1.5782	0.4942	-34.9818
SUB LVL-1	WP1	EQX3	Bottom	-0.006	-0.929	-0.083	1.5782	-0.3386	-44.2723
SUB LVL-1	WP1	EQY1	Top	0.03	5.211	-0.025	-1.8525	-0.5977	156.7771
SUB LVL-1	WP1	EQY1	Bottom	0.03	5.211	-0.025	-1.8525	-0.8475	208.8842
SUB LVL-1	WP1	EQY2	Top	0.026	4.606	-0.012	-0.9426	-0.3892	140.2751
SUB LVL-1	WP1	EQY2	Bottom	0.026	4.606	-0.012	-0.9426	-0.5137	186.3399
SUB LVL-1	WP1	EQY3	Top	0.033	5.815	-0.038	-2.7623	-0.8062	173.2791
SUB LVL-1	WP1	EQY3	Bottom	0.033	5.815	-0.038	-2.7623	-1.1813	231.4284
SUB LVL-1	WP1	Wind-X	Top	-0.0003941	-0.036	-0.015	0.0706	0.1145	-2.6154
SUB LVL-1	WP1	Wind-X	Bottom	-0.0003941	-0.036	-0.015	0.0706	-0.0357	-2.979
SUB LVL-1	WP1	Wind-Y	Top	0.01	1.758	-0.006	-0.4008	-0.1099	48.4332
SUB LVL-1	WP1	Wind-Y	Bottom	0.01	1.758	-0.006	-0.4008	-0.1725	66.017
SUB LVL-1	WP3	Dead	Top	-455.519	-0.966	0.027	-1.5339	0.0857	-358.8997
SUB LVL-1	WP3	Dead	Bottom	-487.988	-0.966	0.027	-1.5339	0.3526	-368.5551
SUB LVL-1	WP3	Extra Dead	Top	-713.932	-26.969	0.012	4.7781	-1.7652	-1555.8419
SUB LVL-1	WP3	Extra Dead	Bottom	-713.932	-26.969	0.012	4.7781	-1.6464	-1825.5356
SUB LVL-1	WP3	EQX1	Top	1.554E-05	-14.604	-0.605	4.0008	0.421	-556.0171
SUB LVL-1	WP3	EQX1	Bottom	1.554E-05	-14.604	-0.605	4.0008	-5.6262	-702.0607

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-1	WP3	EQX2	Top	7.538E-06	-4.07	-0.587	1.6678	0.7845	-313.6761
SUB LVL-1	WP3	EQX2	Bottom	7.538E-06	-4.07	-0.587	1.6678	-5.0847	-354.376
SUB LVL-1	WP3	EQX3	Top	2.355E-05	-25.139	-0.623	6.3338	0.0574	-798.3581
SUB LVL-1	WP3	EQX3	Bottom	2.355E-05	-25.139	-0.623	6.3338	-6.1676	-1049.7455
SUB LVL-1	WP3	EQY1	Top	-0.0001108	135.699	0.083	-7.3979	1.1843	3574.6325
SUB LVL-1	WP3	EQY1	Bottom	-0.0001108	135.699	0.083	-7.3979	2.0108	4931.6182
SUB LVL-1	WP3	EQY2	Top	-9.854E-05	120.268	0.057	-3.8873	0.6036	3195.3217
SUB LVL-1	WP3	EQY2	Bottom	-9.854E-05	120.268	0.057	-3.8873	1.178	4397.9976
SUB LVL-1	WP3	EQY3	Top	-0.000123	151.13	0.108	-10.9085	1.765	3953.9432
SUB LVL-1	WP3	EQY3	Bottom	-0.000123	151.13	0.108	-10.9085	2.8436	5465.2387
SUB LVL-1	WP3	Wind-X	Top	0	-1.241	-0.086	0.3654	0.5534	-58.5453
SUB LVL-1	WP3	Wind-X	Bottom	0	-1.241	-0.086	0.3654	-0.3061	-70.9551
SUB LVL-1	WP3	Wind-Y	Top	-3.714E-05	46.241	0.034	-1.42	-0.0396	1118.3578
SUB LVL-1	WP3	Wind-Y	Bottom	-3.714E-05	46.241	0.034	-1.42	0.2961	1580.7654
SUB LVL-1	WP4	Dead	Top	-115.015	-2.537	0.009	-0.4637	0.0682	-3.946
SUB LVL-1	WP4	Dead	Bottom	-124.596	-2.537	0.009	-0.4637	0.1574	-29.5825
SUB LVL-1	WP4	Extra Dead	Top	-139.503	-4.177	-0.064	1.2258	-0.5639	-53.6824
SUB LVL-1	WP4	Extra Dead	Bottom	-139.503	-4.177	-0.064	1.2258	-1.2037	-95.4476
SUB LVL-1	WP4	EQX1	Top	0.01	-0.543	-0.29	1.0622	0.2655	-23.6426
SUB LVL-1	WP4	EQX1	Bottom	0.01	-0.543	-0.29	1.0622	-2.6375	-29.0759
SUB LVL-1	WP4	EQX2	Top	0.005	-0.216	-0.266	0.4062	0.3913	-13.7508
SUB LVL-1	WP4	EQX2	Bottom	0.005	-0.216	-0.266	0.4062	-2.2719	-15.9122
SUB LVL-1	WP4	EQX3	Top	0.016	-0.871	-0.314	1.7181	0.1397	-33.5344
SUB LVL-1	WP4	EQX3	Bottom	0.016	-0.871	-0.314	1.7181	-3.0031	-42.2395
SUB LVL-1	WP4	EQY1	Top	-0.075	4.371	0.083	-1.9114	0.4998	148.407
SUB LVL-1	WP4	EQY1	Bottom	-0.075	4.371	0.083	-1.9114	1.3249	192.1172
SUB LVL-1	WP4	EQY2	Top	-0.067	3.884	0.046	-0.9289	0.3002	132.8215
SUB LVL-1	WP4	EQY2	Bottom	-0.067	3.884	0.046	-0.9289	0.7633	171.6637
SUB LVL-1	WP4	EQY3	Top	-0.083	4.858	0.119	-2.8939	0.6995	163.9925
SUB LVL-1	WP4	EQY3	Bottom	-0.083	4.858	0.119	-2.8939	1.8866	212.5708
SUB LVL-1	WP4	Wind-X	Top	0.001	-0.053	-0.027	0.062	0.1257	-2.5184
SUB LVL-1	WP4	Wind-X	Bottom	0.001	-0.053	-0.027	0.062	-0.1484	-3.0436
SUB LVL-1	WP4	Wind-Y	Top	-0.025	1.382	0.017	-0.4071	0.0718	45.6338
SUB LVL-1	WP4	Wind-Y	Bottom	-0.025	1.382	0.017	-0.4071	0.2406	59.4536
SUB LVL-1	WP5	Dead	Top	-252.971	-16.035	0.014	-0.8121	0.2985	-1.2695
SUB LVL-1	WP5	Dead	Bottom	-265.815	-16.035	0.014	-0.8121	0.4431	-162.2719
SUB LVL-1	WP5	Extra Dead	Top	-8.168	0.098	-0.018	2.8048	-1.4881	4.6055
SUB LVL-1	WP5	Extra Dead	Bottom	-8.168	0.098	-0.018	2.8048	-1.6713	5.5839
SUB LVL-1	WP5	EQX1	Top	-0.005	0.65	-0.324	2.4091	-0.2397	31.4854
SUB LVL-1	WP5	EQX1	Bottom	-0.005	0.65	-0.324	2.4091	-3.4798	37.9879
SUB LVL-1	WP5	EQX2	Top	-0.002	0.226	-0.315	1.0276	0.1684	17.7413
SUB LVL-1	WP5	EQX2	Bottom	-0.002	0.226	-0.315	1.0276	-2.9787	20.0028
SUB LVL-1	WP5	EQX3	Top	-0.008	1.074	-0.333	3.7906	-0.6478	45.2295
SUB LVL-1	WP5	EQX3	Bottom	-0.008	1.074	-0.333	3.7906	-3.981	55.9731
SUB LVL-1	WP5	EQY1	Top	-0.023	3.474	0.113	-4.3919	1.1845	109.6661



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-1	WP5	EQY1	Bottom	-0.023	3.474	0.113	-4.3919	2.3144	144.4093
SUB LVL-1	WP5	EQY2	Top	-0.027	4.089	0.099	-2.3168	0.5478	131.2217
SUB LVL-1	WP5	EQY2	Bottom	-0.027	4.089	0.099	-2.3168	1.5421	172.1117
SUB LVL-1	WP5	EQY3	Top	-0.018	2.86	0.127	-6.4669	1.8211	88.1105
SUB LVL-1	WP5	EQY3	Bottom	-0.018	2.86	0.127	-6.4669	3.0866	116.7069
SUB LVL-1	WP5	Wind-X	Top	-0.001	0.073	-0.047	0.2269	0.1679	3.1915
SUB LVL-1	WP5	Wind-X	Bottom	-0.001	0.073	-0.047	0.2269	-0.3062	3.9226
SUB LVL-1	WP5	Wind-Y	Top	-0.01	1.467	0.038	-0.9324	0.1203	48.223
SUB LVL-1	WP5	Wind-Y	Bottom	-0.01	1.467	0.038	-0.9324	0.4964	62.8929
SUB LVL-1	WP6	Dead	Top	-283.53	-8.38	-0.029	-2.4818	-0.351	-465.4969
SUB LVL-1	WP6	Dead	Bottom	-316.811	-8.38	-0.029	-2.4818	-0.6437	-549.2957
SUB LVL-1	WP6	Extra Dead	Top	-35.658	1.207	0.018	7.4347	1.9522	57.6052
SUB LVL-1	WP6	Extra Dead	Bottom	-35.658	1.207	0.018	7.4347	2.1301	69.676
SUB LVL-1	WP6	EQX1	Top	-3.633E-05	6.472	-0.895	5.9013	4.2849	336.3021
SUB LVL-1	WP6	EQX1	Bottom	-3.633E-05	6.472	-1.168	6.0548	-6.0261	401.025
SUB LVL-1	WP6	EQX2	Top	-1.689E-05	1.389	-0.895	2.2952	3.7367	192.5436
SUB LVL-1	WP6	EQX2	Bottom	-1.689E-05	1.389	-1.168	2.4487	-6.5819	206.433
SUB LVL-1	WP6	EQX3	Top	-5.577E-05	11.556	-0.894	9.5074	4.833	480.0607
SUB LVL-1	WP6	EQX3	Bottom	-5.577E-05	11.556	-1.167	9.6609	-5.4702	595.6169
SUB LVL-1	WP6	EQY1	Top	-0.0001613	42.656	-0.385	-11.9255	0.1065	1153.5165
SUB LVL-1	WP6	EQY1	Bottom	-0.0001613	42.874	-0.385	-11.9255	-3.739	1581.1662
SUB LVL-1	WP6	EQY2	Top	-0.0001908	50.089	-0.383	-6.4939	0.9487	1378.497
SUB LVL-1	WP6	EQY2	Bottom	-0.0001908	50.307	-0.383	-6.4939	-2.8826	1880.4779
SUB LVL-1	WP6	EQY3	Top	-0.0001318	35.223	-0.386	-17.357	-0.7356	928.536
SUB LVL-1	WP6	EQY3	Bottom	-0.0001318	35.441	-0.386	-17.357	-4.5954	1281.8546
SUB LVL-1	WP6	Wind-X	Top	0	0.584	-0.145	0.5619	1.3621	37.9377
SUB LVL-1	WP6	Wind-X	Bottom	0	0.584	-0.145	0.5619	-0.0847	43.7803
SUB LVL-1	WP6	Wind-Y	Top	-7.477E-05	18.783	-0.134	-2.0782	0.557	508.8248
SUB LVL-1	WP6	Wind-Y	Bottom	-7.477E-05	18.783	-0.134	-2.0782	-0.7866	696.655
SUB LVL-1	SW1	Dead	Top	-750.636	-17.709	0.004	-3.2168	0.1648	-476.4961
SUB LVL-1	SW1	Dead	Bottom	-796.052	-17.709	0.004	-3.2168	0.2091	-653.5869
SUB LVL-1	SW1	Extra Dead	Top	-353.806	-4.099	0.036	11.9769	0.3368	-2577.9533
SUB LVL-1	SW1	Extra Dead	Bottom	-353.806	-4.099	0.036	11.9769	0.6958	-2618.9474
SUB LVL-1	SW1	EQX1	Top	4.55E-05	-19.933	-1.514	9.9751	3.7469	-849.831
SUB LVL-1	SW1	EQX1	Bottom	4.55E-05	-19.933	-1.514	9.9751	-11.3948	-1049.1561
SUB LVL-1	SW1	EQX2	Top	2.176E-05	-5.303	-1.525	4.3059	3.725	-475.2875
SUB LVL-1	SW1	EQX2	Bottom	2.176E-05	-5.303	-1.525	4.3059	-11.526	-528.3172
SUB LVL-1	SW1	EQX3	Top	6.924E-05	-34.562	-1.503	15.6444	3.7689	-1224.3745
SUB LVL-1	SW1	EQX3	Bottom	6.924E-05	-34.562	-1.503	15.6444	-11.2637	-1569.995
SUB LVL-1	SW1	EQY1	Top	-0.0003272	188.658	-0.011	-18.5277	-0.2685	5512.5151
SUB LVL-1	SW1	EQY1	Bottom	-0.0003272	188.658	-0.011	-18.5277	-0.3739	7399.0946
SUB LVL-1	SW1	EQY2	Top	-0.000291	167.198	0.005	-9.9883	-0.2242	4927.024
SUB LVL-1	SW1	EQY2	Bottom	-0.000291	167.198	0.005	-9.9883	-0.1718	6599
SUB LVL-1	SW1	EQY3	Top	-0.0003634	210.118	-0.026	-27.067	-0.3128	6098.0061
SUB LVL-1	SW1	EQY3	Bottom	-0.0003634	210.118	-0.026	-27.067	-0.576	8199.1892

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-1	SW1	Wind-X	Top	0	-1.418	-0.208	1.114	1.2228	-90.1958
SUB LVL-1	SW1	Wind-X	Bottom	0	-1.418	-0.208	1.114	-0.8538	-104.3708
SUB LVL-1	SW1	Wind-Y	Top	-0.0001097	64.515	-0.007	-3.2233	0.0131	1729.0129
SUB LVL-1	SW1	Wind-Y	Bottom	-0.0001097	64.515	-0.007	-3.2233	-0.0562	2374.1649
SUB LVL-1	SW2	Dead	Top	-1203.224	5.561	-0.002	-3.562	0.1328	-886.3308
SUB LVL-1	SW2	Dead	Bottom	-1244.024	5.561	-0.002	-3.562	0.1141	-829.9231
SUB LVL-1	SW2	Extra Dead	Top	-798.216	57.528	-0.0002226	9.9407	0.0209	-3378.6459
SUB LVL-1	SW2	Extra Dead	Bottom	-798.216	57.528	-0.0002226	9.9407	0.0187	-2803.3653
SUB LVL-1	SW2	EQX1	Top	1.095	-18.763	-1.013	8.6856	2.2964	-790.0835
SUB LVL-1	SW2	EQX1	Bottom	1.095	-18.763	-1.013	8.6856	-7.8381	-977.7175
SUB LVL-1	SW2	EQX2	Top	1.095	-6.001	-1.014	3.5905	2.3215	-419.1277
SUB LVL-1	SW2	EQX2	Bottom	1.095	-6.001	-1.014	3.5905	-7.8207	-479.1409
SUB LVL-1	SW2	EQX3	Top	1.094	-31.525	-1.013	13.7808	2.2713	-1161.0393
SUB LVL-1	SW2	EQX3	Bottom	1.094	-31.525	-1.013	13.7808	-7.8555	-1476.2941
SUB LVL-1	SW2	EQY1	Top	-0.003	218.263	0.066	-14.8631	-0.1955	6978.7984
SUB LVL-1	SW2	EQY1	Bottom	-0.003	218.263	0.066	-14.8631	0.4694	9161.426
SUB LVL-1	SW2	EQY2	Top	-0.004	199.337	0.068	-7.2219	-0.233	6406.4058
SUB LVL-1	SW2	EQY2	Bottom	-0.004	199.337	0.068	-7.2219	0.4447	8399.78
SUB LVL-1	SW2	EQY3	Top	-0.002	237.188	0.065	-22.5042	-0.158	7551.191
SUB LVL-1	SW2	EQY3	Bottom	-0.002	237.188	0.065	-22.5042	0.4941	9923.0719
SUB LVL-1	SW2	Wind-X	Top	0.155	-1.785	-0.122	0.6918	0.9175	-80.4821
SUB LVL-1	SW2	Wind-X	Bottom	0.155	-1.785	-0.122	0.6918	-0.2995	-98.3325
SUB LVL-1	SW2	Wind-Y	Top	-0.002	76.812	0.032	-3.0552	-0.1138	2327.618
SUB LVL-1	SW2	Wind-Y	Bottom	-0.002	76.812	0.032	-3.0552	0.21	3095.7381
SUB LVL-1	SW4	Dead	Top	-1152.283	6.319	0.003	-3.8728	-0.0032	-1346.8055
SUB LVL-1	SW4	Dead	Bottom	-1196.25	6.319	0.003	-3.8728	0.0291	-1280.9402
SUB LVL-1	SW4	Extra Dead	Top	-88.117	-10.733	0.012	11.3109	-0.0955	-307.4603
SUB LVL-1	SW4	Extra Dead	Bottom	-88.117	-10.733	0.012	11.3109	0.0252	-414.7905
SUB LVL-1	SW4	EQX1	Top	-1.035	12.443	-1.211	9.8913	2.7871	737.5089
SUB LVL-1	SW4	EQX1	Bottom	-1.035	12.443	-1.211	9.8913	-9.318	861.9356
SUB LVL-1	SW4	EQX2	Top	-1.034	1.89	-1.22	4.3224	2.8566	413.329
SUB LVL-1	SW4	EQX2	Bottom	-1.034	1.89	-1.22	4.3224	-9.3424	432.2327
SUB LVL-1	SW4	EQX3	Top	-1.036	22.995	-1.201	15.4602	2.7177	1061.6888
SUB LVL-1	SW4	EQX3	Bottom	-1.036	22.995	-1.201	15.4602	-9.2937	1291.6385
SUB LVL-1	SW4	EQY1	Top	-0.01	153.316	-0.015	-17.7691	0.275	4581.778
SUB LVL-1	SW4	EQY1	Bottom	-0.01	153.316	-0.015	-17.7691	0.1201	6114.9413
SUB LVL-1	SW4	EQY2	Top	-0.011	168.674	-0.002	-9.4077	0.1732	5088.0604
SUB LVL-1	SW4	EQY2	Bottom	-0.011	168.674	-0.002	-9.4077	0.1561	6774.7955
SUB LVL-1	SW4	EQY3	Top	-0.009	137.959	-0.029	-26.1305	0.3767	4075.4956
SUB LVL-1	SW4	EQY3	Bottom	-0.009	137.959	-0.029	-26.1305	0.0842	5455.0872
SUB LVL-1	SW4	Wind-X	Top	-0.146	0.76	-0.167	0.9023	1.1396	72.9025
SUB LVL-1	SW4	Wind-X	Bottom	-0.146	0.76	-0.167	0.9023	-0.5292	80.5035
SUB LVL-1	SW4	Wind-Y	Top	-0.006	63.662	-0.008	-3.8568	0.1786	1915.8815
SUB LVL-1	SW4	Wind-Y	Bottom	-0.006	63.662	-0.008	-3.8568	0.0982	2552.497
SUB LVL-1	LW1	Dead	Top	-546.837	-3.957	-0.032	-3.0663	-5.3692	-42.4457

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-1	LW1	Dead	Bottom	-594.714	-3.957	-0.032	-3.0742	-5.6896	57.3787
SUB LVL-1	LW1	Extra Dead	Top	-15.503	-0.354	-0.175	9.3672	-14.3106	15.2776
SUB LVL-1	LW1	Extra Dead	Bottom	-15.503	-0.354	-0.175	9.324	-16.0582	15.565
SUB LVL-1	LW1	EQX1	Top	489.795	341.914	-0.096	7.9816	-3.7061	866.4221
SUB LVL-1	LW1	EQX1	Bottom	489.795	341.914	-0.096	7.9579	-4.665	4164.5454
SUB LVL-1	LW1	EQX2	Top	489.967	341.865	-0.037	3.3662	-2.1502	867.2422
SUB LVL-1	LW1	EQX2	Bottom	489.967	341.865	-0.037	3.3572	-2.5157	4164.8307
SUB LVL-1	LW1	EQX3	Top	489.623	341.964	-0.155	12.5969	-5.262	865.602
SUB LVL-1	LW1	EQX3	Bottom	489.623	341.964	-0.155	12.5586	-6.8142	4164.2601
SUB LVL-1	LW1	EQY1	Top	-2.297	0.043	1.256	-14.3883	35.3639	-1.9309
SUB LVL-1	LW1	EQY1	Bottom	-2.297	0.043	1.256	-14.0781	47.9192	-0.9346
SUB LVL-1	LW1	EQY2	Top	-2.696	0.193	1.168	-7.448	32.9296	-5.1722
SUB LVL-1	LW1	EQY2	Bottom	-2.696	0.193	1.168	-7.1594	44.6097	-2.5746
SUB LVL-1	LW1	EQY3	Top	-1.899	-0.107	1.343	-21.3287	37.7981	1.3104
SUB LVL-1	LW1	EQY3	Bottom	-1.899	-0.107	1.343	-20.9968	51.2286	0.7054
SUB LVL-1	LW1	Wind-X	Top	68.342	49.281	-0.002	0.7636	-0.2714	19.8256
SUB LVL-1	LW1	Wind-X	Bottom	68.342	49.281	-0.002	0.763	-0.2943	495.7453
SUB LVL-1	LW1	Wind-Y	Top	-1.778	0.599	0.435	-2.7136	11.303	-5.5307
SUB LVL-1	LW1	Wind-Y	Bottom	-1.778	0.599	0.435	-2.6061	15.6525	0.8985
SUB LVL-1	LW2	Dead	Top	-555.826	2.825	-0.029	-2.9641	-5.9298	63.9659
SUB LVL-1	LW2	Dead	Bottom	-603.703	2.825	-0.029	-2.9593	-6.2179	-3.4677
SUB LVL-1	LW2	Extra Dead	Top	-17.738	0.088	-0.11	9.3461	-10.8558	-0.6428
SUB LVL-1	LW2	Extra Dead	Bottom	-17.738	0.088	-0.11	9.3645	-11.9534	-2.721
SUB LVL-1	LW2	EQX1	Top	-489.797	342.223	-0.015	7.945	-1.3671	813.9241
SUB LVL-1	LW2	EQX1	Bottom	-489.797	342.223	-0.015	7.9475	-1.517	4154.3825
SUB LVL-1	LW2	EQX2	Top	-489.968	342.276	0.007	3.3415	-0.7588	812.7137
SUB LVL-1	LW2	EQX2	Bottom	-489.968	342.276	0.007	3.3404	-0.6903	4153.6765
SUB LVL-1	LW2	EQX3	Top	-489.625	342.169	-0.037	12.5484	-1.9754	815.1345
SUB LVL-1	LW2	EQX3	Bottom	-489.625	342.169	-0.037	12.5546	-2.3438	4155.0886
SUB LVL-1	LW2	EQY1	Top	2.34	-0.043	1.07	-14.3119	32.6565	8.4687
SUB LVL-1	LW2	EQY1	Bottom	2.34	-0.043	1.07	-14.4906	43.3612	8.4267
SUB LVL-1	LW2	EQY2	Top	2.738	-0.125	1.038	-7.3895	31.6988	10.3431
SUB LVL-1	LW2	EQY2	Bottom	2.738	-0.125	1.038	-7.5628	42.0815	9.5494
SUB LVL-1	LW2	EQY3	Top	1.941	0.039	1.103	-21.2343	33.6141	6.5944
SUB LVL-1	LW2	EQY3	Bottom	1.941	0.039	1.103	-21.4183	44.6408	7.304
SUB LVL-1	LW2	Wind-X	Top	-68.343	49.403	-0.007	0.7529	-0.2267	14.6053
SUB LVL-1	LW2	Wind-X	Bottom	-68.343	49.403	-0.007	0.7541	-0.3003	497.2228
SUB LVL-1	LW2	Wind-Y	Top	1.794	0.216	0.383	-2.7089	11.108	2.8187
SUB LVL-1	LW2	Wind-Y	Bottom	1.794	0.216	0.383	-2.7728	14.9374	5.2785
SUB LVL-1	LW3	Dead	Top	-585.201	-4.43	-0.167	-3.2309	-6.0991	-68.6905
SUB LVL-1	LW3	Dead	Bottom	-633.005	-4.43	-0.167	-3.2734	-7.7698	40.1464
SUB LVL-1	LW3	Extra Dead	Top	-17.893	0.086	-0.135	9.2334	-7.107	-7.9237
SUB LVL-1	LW3	Extra Dead	Bottom	-17.893	0.086	-0.135	9.1991	-8.4564	-2.5133
SUB LVL-1	LW3	EQX1	Top	482.536	341.173	-0.046	7.9206	0.529	824.4702
SUB LVL-1	LW3	EQX1	Bottom	482.536	341.173	-0.046	7.909	0.0735	4113.5442

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-1	LW3	EQX2	Top	482.287	341.171	-0.06	3.315	0.3933	824.0618
SUB LVL-1	LW3	EQX2	Bottom	482.287	341.171	-0.06	3.2999	-0.203	4113.1861
SUB LVL-1	LW3	EQX3	Top	482.785	341.174	-0.031	12.5261	0.6647	824.8787
SUB LVL-1	LW3	EQX3	Bottom	482.785	341.174	-0.031	12.5181	0.3499	4113.9023
SUB LVL-1	LW3	EQY1	Top	2.2	-0.165	1.225	-14.3418	26.8212	1.8141
SUB LVL-1	LW3	EQY1	Bottom	2.2	-0.165	1.225	-14.0304	39.0727	-0.3933
SUB LVL-1	LW3	EQY2	Top	2.719	-0.187	1.244	-7.4134	27.0621	3.0772
SUB LVL-1	LW3	EQY2	Bottom	2.719	-0.187	1.244	-7.0971	39.5064	0.5139
SUB LVL-1	LW3	EQY3	Top	1.68	-0.142	1.206	-21.2703	26.5804	0.551
SUB LVL-1	LW3	EQY3	Bottom	1.68	-0.142	1.206	-20.9638	38.639	-1.3006
SUB LVL-1	LW3	Wind-X	Top	67.285	49.282	-0.007	0.7525	0.0637	17.4338
SUB LVL-1	LW3	Wind-X	Bottom	67.285	49.282	-0.007	0.7507	-0.0098	493.1551
SUB LVL-1	LW3	Wind-Y	Top	1.757	-0.161	0.434	-2.6801	9.6449	2.1258
SUB LVL-1	LW3	Wind-Y	Bottom	1.757	-0.161	0.434	-2.5698	13.9827	0.066
SUB LVL-1	LW4	Dead	Top	-578.547	5.289	-0.159	-2.8742	-6.8914	-17.3151
SUB LVL-1	LW4	Dead	Bottom	-626.424	5.289	-0.159	-2.8477	-8.4807	-63.9015
SUB LVL-1	LW4	Extra Dead	Top	-14.573	0.308	-0.074	9.527	-3.619	-5.882
SUB LVL-1	LW4	Extra Dead	Bottom	-14.573	0.308	-0.074	9.5394	-4.3615	-5.2301
SUB LVL-1	LW4	EQX1	Top	-482.579	343.842	0.033	8.0785	2.9545	786.5915
SUB LVL-1	LW4	EQX1	Bottom	-482.579	343.842	0.033	8.0729	3.2864	4144.4511
SUB LVL-1	LW4	EQX2	Top	-482.331	343.699	-0.001	3.4991	1.7132	788.4044
SUB LVL-1	LW4	EQX2	Bottom	-482.331	343.699	-0.001	3.4993	1.7038	4144.8747
SUB LVL-1	LW4	EQX3	Top	-482.828	343.985	0.067	12.6578	4.1958	784.7787
SUB LVL-1	LW4	EQX3	Bottom	-482.828	343.985	0.067	12.6465	4.869	4144.0275
SUB LVL-1	LW4	EQY1	Top	-2.151	-0.476	1.006	-15.3944	24.0953	-11.0305
SUB LVL-1	LW4	EQY1	Bottom	-2.151	-0.476	1.006	-15.5623	34.1556	-16.1541
SUB LVL-1	LW4	EQY2	Top	-2.67	-0.311	1.056	-8.5045	26.0319	-12.5453
SUB LVL-1	LW4	EQY2	Bottom	-2.67	-0.311	1.056	-8.6809	36.5963	-16.1035
SUB LVL-1	LW4	EQY3	Top	-1.632	-0.642	0.956	-22.2843	22.1587	-9.5156
SUB LVL-1	LW4	EQY3	Bottom	-1.632	-0.642	0.956	-22.4438	31.7149	-16.2047
SUB LVL-1	LW4	Wind-X	Top	-67.292	49.707	-0.001	0.7853	0.3198	13.1376
SUB LVL-1	LW4	Wind-X	Bottom	-67.292	49.707	-0.001	0.7854	0.3109	498.9716
SUB LVL-1	LW4	Wind-Y	Top	-1.739	-0.744	0.395	-2.9996	9.2033	0.3015
SUB LVL-1	LW4	Wind-Y	Bottom	-1.739	-0.744	0.395	-3.0655	13.1523	-7.4277
SUB LVL-1	SW5	Dead	Top	-706.263	19.301	-0.028	-6.4747	0.4368	-2290.0259
SUB LVL-1	SW5	Dead	Bottom	-763.422	19.301	-0.028	-6.4747	0.1529	-2120.1835
SUB LVL-1	SW5	Extra Dead	Top	-34.92	5.349	0.003	19.0113	-0.563	176.7064
SUB LVL-1	SW5	Extra Dead	Bottom	-34.92	5.349	0.003	19.0113	-0.5328	230.2012
SUB LVL-1	SW5	EQX1	Top	5.109E-05	37.275	-2.306	11.8704	5.5887	1170.6081
SUB LVL-1	SW5	EQX1	Bottom	5.109E-05	37.275	-2.503	14.0894	-18.536	1543.3557
SUB LVL-1	SW5	EQX2	Top	2.362E-05	13.754	-2.307	2.6033	5.7421	624.2616
SUB LVL-1	SW5	EQX2	Bottom	2.362E-05	13.754	-2.503	4.8224	-18.3883	761.8051
SUB LVL-1	SW5	EQX3	Top	7.857E-05	60.795	-2.306	21.1374	5.4353	1716.9546
SUB LVL-1	SW5	EQX3	Bottom	7.857E-05	60.795	-2.502	23.3564	-18.6838	2324.9063
SUB LVL-1	SW5	EQY1	Top	0.000228	197.043	-0.006	-33.7143	0.8182	4435.998

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-1	SW5	EQY1	Bottom	0.000228	197.2	-0.006	-33.7143	0.7629	6407.2779
SUB LVL-1	SW5	EQY2	Top	0.0002697	232.029	-0.004	-19.7628	0.5784	5280.846
SUB LVL-1	SW5	EQY2	Bottom	0.0002697	232.187	-0.004	-19.7628	0.5361	7601.9887
SUB LVL-1	SW5	EQY3	Top	0.0001863	162.057	-0.007	-47.6659	1.058	3591.15
SUB LVL-1	SW5	EQY3	Bottom	0.0001863	162.214	-0.007	-47.6659	0.9897	5212.5672
SUB LVL-1	SW5	Wind-X	Top	5.005E-06	3.618	-0.327	1.0856	2.065	123.9663
SUB LVL-1	SW5	Wind-X	Bottom	5.005E-06	3.618	-0.327	1.0856	-1.2097	160.1511
SUB LVL-1	SW5	Wind-Y	Top	0.0001057	89.536	-0.002	-6.2127	0.2455	1997.2462
SUB LVL-1	SW5	Wind-Y	Bottom	0.0001057	89.536	-0.002	-6.2127	0.2226	2892.6089
SUB LVL-1	SW3	Dead	Top	-998.799	6.806	0.007	-3.3774	-0.0509	-402.1502
SUB LVL-1	SW3	Dead	Bottom	-1036.932	6.806	0.007	-3.3774	0.0141	-321.91
SUB LVL-1	SW3	Extra Dead	Top	-61.799	-13.42	0.003	9.5596	-0.0172	-1007.9394
SUB LVL-1	SW3	Extra Dead	Bottom	-61.799	-13.42	0.003	9.5596	0.0079	-1142.1352
SUB LVL-1	SW3	EQX1	Top	-0.008	-2.354	-1.165	7.4071	2.7271	-39.0718
SUB LVL-1	SW3	EQX1	Bottom	-0.008	-2.354	-1.165	7.4071	-8.9245	-62.6138
SUB LVL-1	SW3	EQX2	Top	-0.009	-1.37	-1.165	2.5281	2.7215	-16.0806
SUB LVL-1	SW3	EQX2	Bottom	-0.009	-1.37	-1.165	2.5281	-8.9319	-29.7766
SUB LVL-1	SW3	EQX3	Top	-0.007	-3.339	-1.165	12.2862	2.7326	-62.0629
SUB LVL-1	SW3	EQX3	Bottom	-0.007	-3.339	-1.165	12.2862	-8.9171	-95.451
SUB LVL-1	SW3	EQY1	Top	-0.079	135.149	0.004	-14.5749	-0.0113	3861.1679
SUB LVL-1	SW3	EQY1	Bottom	-0.079	135.149	0.004	-14.5749	0.0289	5212.6551
SUB LVL-1	SW3	EQY2	Top	-0.077	133.583	0.004	-7.262	-0.0026	3827.5465
SUB LVL-1	SW3	EQY2	Bottom	-0.077	133.583	0.004	-7.262	0.0405	5163.3812
SUB LVL-1	SW3	EQY3	Top	-0.081	136.714	0.004	-21.8878	-0.02	3894.7892
SUB LVL-1	SW3	EQY3	Bottom	-0.081	136.714	0.004	-21.8878	0.0172	5261.929
SUB LVL-1	SW3	Wind-X	Top	-0.001	-0.428	-0.153	0.542	1.0044	-4.112
SUB LVL-1	SW3	Wind-X	Bottom	-0.001	-0.428	-0.153	0.542	-0.53	-8.3909
SUB LVL-1	SW3	Wind-Y	Top	-0.027	50.322	0.003	-3.1419	-0.0106	1397.0679
SUB LVL-1	SW3	Wind-Y	Bottom	-0.027	50.322	0.003	-3.1419	0.0188	1900.289
SUB LVL-2	WP1	Dead	Top	-276.497	13.635	-0.02	-0.2925	-0.127	-41.0058
SUB LVL-2	WP1	Dead	Bottom	-285.372	13.635	-0.02	-0.2925	-0.3269	95.9642
SUB LVL-2	WP1	Extra Dead	Top	-7.786	-0.837	0.006	0.9664	0.6957	-78.2867
SUB LVL-2	WP1	Extra Dead	Bottom	-7.786	-0.837	0.006	0.9664	0.7579	-86.6536
SUB LVL-2	WP1	EQX1	Top	-0.005	-0.567	-0.144	0.8569	-0.5551	-29.6225
SUB LVL-2	WP1	EQX1	Bottom	-0.005	-0.567	-0.144	0.8569	-1.9915	-35.2939
SUB LVL-2	WP1	EQX2	Top	-0.002	-0.066	-0.152	0.3269	-0.7716	-14.9776
SUB LVL-2	WP1	EQX2	Bottom	-0.002	-0.066	-0.152	0.3269	-2.2918	-15.6408
SUB LVL-2	WP1	EQX3	Top	-0.007	-1.068	-0.135	1.3869	-0.3386	-44.2673
SUB LVL-2	WP1	EQX3	Bottom	-0.007	-1.068	-0.135	1.3869	-1.6912	-54.9469
SUB LVL-2	WP1	EQY1	Top	0.035	6.231	-0.021	-1.5736	-0.8475	208.8595
SUB LVL-2	WP1	EQY1	Bottom	0.035	6.231	-0.021	-1.5736	-1.0545	271.1739
SUB LVL-2	WP1	EQY2	Top	0.031	5.5	-0.009	-0.7818	-0.5137	186.318
SUB LVL-2	WP1	EQY2	Bottom	0.031	5.5	-0.009	-0.7818	-0.5988	241.3184
SUB LVL-2	WP1	EQY3	Top	0.038	6.963	-0.033	-2.3655	-1.1813	231.4009
SUB LVL-2	WP1	EQY3	Bottom	0.038	6.963	-0.033	-2.3655	-1.5101	301.0294

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-2	WP1	Wind-X	Top	-0.0004568	-0.042	-0.017	0.057	-0.0357	-2.9787
SUB LVL-2	WP1	Wind-X	Bottom	-0.0004568	-0.042	-0.017	0.057	-0.206	-3.3945
SUB LVL-2	WP1	Wind-Y	Top	0.012	2.215	-0.003	-0.3343	-0.1725	66.0085
SUB LVL-2	WP1	Wind-Y	Bottom	0.012	2.215	-0.003	-0.3343	-0.2066	88.1541
SUB LVL-2	WP3	Dead	Top	-538.441	2.262	0.007	-1.3369	0.3526	-346.8415
SUB LVL-2	WP3	Dead	Bottom	-568.81	2.262	0.007	-1.3369	0.4213	-322.8857
SUB LVL-2	WP3	Extra Dead	Top	-799.492	-16.991	-0.094	3.3607	-1.6464	-1771.8882
SUB LVL-2	WP3	Extra Dead	Bottom	-799.492	-16.991	-0.094	3.3607	-2.5848	-1941.7988
SUB LVL-2	WP3	EQX1	Top	1.771E-05	-12.948	-0.671	3.6913	-5.6262	-702.0604
SUB LVL-2	WP3	EQX1	Bottom	1.771E-05	-12.948	-0.728	3.84	-12.6209	-831.5437
SUB LVL-2	WP3	EQX2	Top	8.439E-06	-3.306	-0.633	1.8311	-5.0847	-354.3759
SUB LVL-2	WP3	EQX2	Bottom	8.439E-06	-3.306	-0.691	1.9798	-11.7037	-387.432
SUB LVL-2	WP3	EQX3	Top	2.699E-05	-22.591	-0.708	5.5515	-6.1676	-1049.745
SUB LVL-2	WP3	EQX3	Bottom	2.699E-05	-22.591	-0.766	5.7002	-13.5381	-1275.6554
SUB LVL-2	WP3	EQY1	Top	-0.0001277	121.887	0.34	-5.6396	2.0108	4931.6157
SUB LVL-2	WP3	EQY1	Bottom	-0.0001277	121.933	0.34	-5.6396	5.4141	6150.7169
SUB LVL-2	WP3	EQY2	Top	-0.0001136	107.799	0.285	-2.8507	1.178	4397.9954
SUB LVL-2	WP3	EQY2	Bottom	-0.0001136	107.845	0.285	-2.8507	4.0279	5476.2188
SUB LVL-2	WP3	EQY3	Top	-0.0001418	135.975	0.396	-8.4285	2.8436	5465.2359
SUB LVL-2	WP3	EQY3	Bottom	-0.0001418	136.021	0.396	-8.4285	6.8002	6825.215
SUB LVL-2	WP3	Wind-X	Top	0	-1.082	-0.031	0.4227	-0.3061	-70.955
SUB LVL-2	WP3	Wind-X	Bottom	0	-1.082	-0.031	0.4227	-0.6177	-81.7789
SUB LVL-2	WP3	Wind-Y	Top	-4.295E-05	43.759	0.14	-1.0464	0.2961	1580.7645
SUB LVL-2	WP3	Wind-Y	Bottom	-4.295E-05	43.759	0.14	-1.0464	1.6973	2018.3517
SUB LVL-2	WP4	Dead	Top	-136.346	-5.8	0.026	-0.6285	0.1574	5.0947
SUB LVL-2	WP4	Dead	Bottom	-148.252	-5.8	0.026	-0.6285	0.4139	-52.9038
SUB LVL-2	WP4	Extra Dead	Top	-156.222	-9.226	0.026	1.3044	-1.2037	-51.7031
SUB LVL-2	WP4	Extra Dead	Bottom	-156.222	-9.226	0.026	1.3044	-0.9425	-143.9673
SUB LVL-2	WP4	EQX1	Top	0.012	-1.473	-0.064	1.2784	-2.6375	-29.0694
SUB LVL-2	WP4	EQX1	Bottom	0.012	-1.473	-0.064	1.2784	-3.2776	-43.8
SUB LVL-2	WP4	EQX2	Top	0.006	-0.41	-0.063	0.4632	-2.2719	-15.9095
SUB LVL-2	WP4	EQX2	Bottom	0.006	-0.41	-0.063	0.4632	-2.8978	-20.0102
SUB LVL-2	WP4	EQX3	Top	0.018	-2.536	-0.065	2.0937	-3.0031	-42.2292
SUB LVL-2	WP4	EQX3	Bottom	0.018	-2.536	-0.065	2.0937	-3.6575	-67.5897
SUB LVL-2	WP4	EQY1	Top	-0.086	13.55	0.045	-2.4447	1.3249	192.0666
SUB LVL-2	WP4	EQY1	Bottom	-0.086	13.55	0.045	-2.4447	1.7794	327.5699
SUB LVL-2	WP4	EQY2	Top	-0.077	11.996	0.044	-1.2288	0.7633	171.6187
SUB LVL-2	WP4	EQY2	Bottom	-0.077	11.996	0.044	-1.2288	1.2033	291.5819
SUB LVL-2	WP4	EQY3	Top	-0.096	15.104	0.047	-3.6606	1.8866	212.5145
SUB LVL-2	WP4	EQY3	Bottom	-0.096	15.104	0.047	-3.6606	2.3555	363.5579
SUB LVL-2	WP4	Wind-X	Top	0.001	-0.147	-0.012	0.0396	-0.1484	-3.043
SUB LVL-2	WP4	Wind-X	Bottom	0.001	-0.147	-0.012	0.0396	-0.2638	-4.5142
SUB LVL-2	WP4	Wind-Y	Top	-0.029	4.781	0.022	-0.5475	0.2406	59.4363
SUB LVL-2	WP4	Wind-Y	Bottom	-0.029	4.781	0.022	-0.5475	0.4568	107.2498
SUB LVL-2	WP5	Dead	Top	-304.22	-15.902	0.004	-0.6802	0.4431	-17.8757

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-2	WP5	Dead	Bottom	-317.063	-15.902	0.004	-0.6802	0.482	-177.5487
SUB LVL-2	WP5	Extra Dead	Top	-8.168	0.161	-0.027	2.2687	-1.6713	5.5839
SUB LVL-2	WP5	Extra Dead	Bottom	-8.168	0.161	-0.027	2.2687	-1.9431	7.1917
SUB LVL-2	WP5	EQX1	Top	-0.006	1.079	-0.443	2.1819	-3.4798	37.9839
SUB LVL-2	WP5	EQX1	Bottom	-0.006	1.079	-0.443	2.1819	-7.9123	48.7689
SUB LVL-2	WP5	EQX2	Top	-0.003	0.456	-0.419	0.9737	-2.9787	20.0011
SUB LVL-2	WP5	EQX2	Bottom	-0.003	0.456	-0.419	0.9737	-7.1681	24.5611
SUB LVL-2	WP5	EQX3	Top	-0.009	1.701	-0.468	3.3901	-3.981	55.9666
SUB LVL-2	WP5	EQX3	Bottom	-0.009	1.701	-0.468	3.3901	-8.6566	72.9767
SUB LVL-2	WP5	EQY1	Top	-0.027	4.911	0.085	-3.7209	2.3144	144.3894
SUB LVL-2	WP5	EQY1	Bottom	-0.027	4.911	0.085	-3.7209	3.1649	193.4999
SUB LVL-2	WP5	EQY2	Top	-0.032	5.82	0.049	-1.9145	1.5421	172.0882
SUB LVL-2	WP5	EQY2	Bottom	-0.032	5.82	0.049	-1.9145	2.0348	230.2921
SUB LVL-2	WP5	EQY3	Top	-0.022	4.002	0.121	-5.5274	3.0866	116.6906
SUB LVL-2	WP5	EQY3	Bottom	-0.022	4.002	0.121	-5.5274	4.295	156.7077
SUB LVL-2	WP5	Wind-X	Top	-0.001	0.123	-0.048	0.2297	-0.3062	3.9222
SUB LVL-2	WP5	Wind-X	Bottom	-0.001	0.123	-0.048	0.2297	-0.7819	5.15
SUB LVL-2	WP5	Wind-Y	Top	-0.012	2.225	0.018	-0.7741	0.4964	62.8836
SUB LVL-2	WP5	Wind-Y	Bottom	-0.012	2.225	0.018	-0.7741	0.6764	85.1333
SUB LVL-2	WP6	Dead	Top	-347.183	-5.221	0.076	-2.0064	-0.6437	-577.4953
SUB LVL-2	WP6	Dead	Bottom	-380.464	-5.221	0.076	-2.0064	0.1174	-629.701
SUB LVL-2	WP6	Extra Dead	Top	-41.059	1.445	0.027	6.0333	2.1301	67.3751
SUB LVL-2	WP6	Extra Dead	Bottom	-41.059	1.445	0.027	6.0333	2.3968	81.8274
SUB LVL-2	WP6	EQX1	Top	-4.204E-05	8.035	-1.005	5.0918	-6.0261	401.0247
SUB LVL-2	WP6	EQX1	Bottom	-4.204E-05	8.035	-1.22	5.2396	-17.1523	481.3777
SUB LVL-2	WP6	EQX2	Top	-1.929E-05	1.534	-1.043	1.8794	-6.5819	206.4329
SUB LVL-2	WP6	EQX2	Bottom	-1.929E-05	1.534	-1.258	2.0272	-18.0826	221.7761
SUB LVL-2	WP6	EQX3	Top	-6.479E-05	14.536	-0.968	8.3042	-5.4702	595.6166
SUB LVL-2	WP6	EQX3	Bottom	-6.479E-05	14.536	-1.183	8.452	-16.2219	740.9792
SUB LVL-2	WP6	EQY1	Top	-0.000189	55.005	0.106	-9.7431	-3.739	1581.1652
SUB LVL-2	WP6	EQY1	Bottom	-0.000189	55.177	0.106	-9.7431	-2.6768	2132.0742
SUB LVL-2	WP6	EQY2	Top	-0.0002235	64.507	0.162	-4.9201	-2.8826	1880.4766
SUB LVL-2	WP6	EQY2	Bottom	-0.0002235	64.679	0.162	-4.9201	-1.2635	2526.4111
SUB LVL-2	WP6	EQY3	Top	-0.0001545	45.502	0.051	-14.5661	-4.5954	1281.8537
SUB LVL-2	WP6	EQY3	Bottom	-0.0001545	45.674	0.051	-14.5661	-4.0901	1737.7374
SUB LVL-2	WP6	Wind-X	Top	0	0.587	-0.127	0.4578	-0.0847	43.7803
SUB LVL-2	WP6	Wind-X	Bottom	0	0.587	-0.127	0.4578	-1.3579	49.6489
SUB LVL-2	WP6	Wind-Y	Top	-8.77E-05	25.739	0.102	-1.6207	-0.7866	696.6545
SUB LVL-2	WP6	Wind-Y	Bottom	-8.77E-05	25.739	0.102	-1.6207	0.2339	954.0427
SUB LVL-2	SW1	Dead	Top	-890.622	-17.364	-0.054	-2.7847	0.2091	-463.4862
SUB LVL-2	SW1	Dead	Bottom	-936.039	-17.364	-0.054	-2.7847	-0.3264	-637.1214
SUB LVL-2	SW1	Extra Dead	Top	-394.651	-3.364	-0.07	9.9317	0.6958	-2883.8283
SUB LVL-2	SW1	Extra Dead	Bottom	-394.651	-3.364	-0.07	9.9317	-0.0035	-2917.4717
SUB LVL-2	SW1	EQX1	Top	5.132E-05	-22.349	-1.766	9.8435	-11.3948	-1049.1559
SUB LVL-2	SW1	EQX1	Bottom	5.132E-05	-22.349	-1.766	9.8435	-29.0509	-1272.6412

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-2	SW1	EQX2	Top	2.423E-05	-5.276	-1.765	4.843	-11.526	-528.3171
SUB LVL-2	SW1	EQX2	Bottom	2.423E-05	-5.276	-1.765	4.843	-29.1778	-581.0728
SUB LVL-2	SW1	EQX3	Top	7.841E-05	-39.421	-1.766	14.844	-11.2637	-1569.9948
SUB LVL-2	SW1	EQX3	Bottom	7.841E-05	-39.421	-1.766	14.844	-28.9239	-1964.2097
SUB LVL-2	SW1	EQY1	Top	-0.0003722	215.085	0.026	-15.6589	-0.3739	7399.0937
SUB LVL-2	SW1	EQY1	Bottom	-0.0003722	215.085	0.026	-15.6589	-0.1176	9549.9401
SUB LVL-2	SW1	EQY2	Top	-0.000331	190.144	0.025	-8.1491	-0.1718	6598.9992
SUB LVL-2	SW1	EQY2	Bottom	-0.000331	190.144	0.025	-8.1491	0.0738	8500.4435
SUB LVL-2	SW1	EQY3	Top	-0.0004134	240.025	0.027	-23.1687	-0.576	8199.1881
SUB LVL-2	SW1	EQY3	Bottom	-0.0004134	240.025	0.027	-23.1687	-0.309	10599.4367
SUB LVL-2	SW1	Wind-X	Top	5.158E-06	-1.635	-0.245	1.3943	-0.8538	-104.3708
SUB LVL-2	SW1	Wind-X	Bottom	5.158E-06	-1.635	-0.245	1.3943	-3.3028	-120.7193
SUB LVL-2	SW1	Wind-Y	Top	-0.0001251	77.603	0.008	-2.6466	-0.0562	2374.1645
SUB LVL-2	SW1	Wind-Y	Bottom	-0.0001251	77.603	0.008	-2.6466	0.0264	3150.1907
SUB LVL-2	SW2	Dead	Top	-1428.709	4.266	-0.049	-2.4046	0.1749	-917.4873
SUB LVL-2	SW2	Dead	Bottom	-1469.509	4.266	-0.049	-2.4046	-0.3109	-874.0255
SUB LVL-2	SW2	Extra Dead	Top	-889.614	48.073	-0.009	8.4607	0.0702	-3751.1251
SUB LVL-2	SW2	Extra Dead	Bottom	-889.614	48.073	-0.009	8.4607	-0.0235	-3270.3962
SUB LVL-2	SW2	EQX1	Top	1.301	-19.715	-1.541	5.7622	-7.7315	-977.7175
SUB LVL-2	SW2	EQX1	Bottom	1.301	-19.715	-1.541	5.7622	-23.1368	-1174.8709
SUB LVL-2	SW2	EQX2	Top	1.301	-5.709	-1.542	1.1547	-7.7141	-479.1409
SUB LVL-2	SW2	EQX2	Bottom	1.301	-5.709	-1.542	1.1547	-23.1295	-536.235
SUB LVL-2	SW2	EQX3	Top	1.301	-33.721	-1.54	10.3696	-7.7489	-1476.294
SUB LVL-2	SW2	EQX3	Bottom	1.301	-33.721	-1.54	10.3696	-23.1441	-1813.5068
SUB LVL-2	SW2	EQY1	Top	-0.005	237.518	-0.14	-13.8986	0.4686	9161.4254
SUB LVL-2	SW2	EQY1	Bottom	-0.005	237.518	-0.14	-13.8986	-0.93	11536.6099
SUB LVL-2	SW2	EQY2	Top	-0.005	216.871	-0.139	-7.0233	0.4439	8399.7795
SUB LVL-2	SW2	EQY2	Bottom	-0.005	216.871	-0.139	-7.0233	-0.9423	10568.4903
SUB LVL-2	SW2	EQY3	Top	-0.004	258.166	-0.141	-20.7738	0.4933	9923.0714
SUB LVL-2	SW2	EQY3	Bottom	-0.004	258.166	-0.141	-20.7738	-0.9178	12504.7295
SUB LVL-2	SW2	Wind-X	Top	0.185	-1.739	-0.276	0.38	-0.284	-98.3325
SUB LVL-2	SW2	Wind-X	Bottom	0.185	-1.739	-0.276	0.38	-3.0446	-115.727
SUB LVL-2	SW2	Wind-Y	Top	-0.003	86.884	-0.082	-2.9672	0.2097	3095.7379
SUB LVL-2	SW2	Wind-Y	Bottom	-0.003	86.884	-0.082	-2.9672	-0.6137	3964.5761
SUB LVL-2	SW4	Dead	Top	-1366.143	8.198	0.04	-3.019	-0.0908	-1590.4078
SUB LVL-2	SW4	Dead	Bottom	-1410.11	8.198	0.04	-3.019	0.3093	-1505.7524
SUB LVL-2	SW4	Extra Dead	Top	-95.947	-8.99	-0.007	9.1067	0.021	-339.49
SUB LVL-2	SW4	Extra Dead	Bottom	-95.947	-8.99	-0.007	9.1067	-0.0477	-429.3869
SUB LVL-2	SW4	EQX1	Top	-1.217	14.613	-1.665	8.7733	-9.2246	861.9355
SUB LVL-2	SW4	EQX1	Bottom	-1.217	14.613	-1.665	8.7733	-25.8778	1008.0703
SUB LVL-2	SW4	EQX2	Top	-1.216	2.767	-1.656	3.864	-9.2491	432.2327
SUB LVL-2	SW4	EQX2	Bottom	-1.216	2.767	-1.656	3.864	-25.8042	459.9025
SUB LVL-2	SW4	EQX3	Top	-1.218	26.46	-1.675	13.6826	-9.2002	1291.6384
SUB LVL-2	SW4	EQX3	Bottom	-1.218	26.46	-1.675	13.6826	-25.9514	1556.2381
SUB LVL-2	SW4	EQY1	Top	-0.011	168.098	-0.021	-14.828	0.1207	6114.9408



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-2	SW4	EQY1	Bottom	-0.011	168.098	-0.021	-14.828	-0.0845	7795.9232
SUB LVL-2	SW4	EQY2	Top	-0.013	185.35	-0.035	-7.4838	0.1568	6774.7948
SUB LVL-2	SW4	EQY2	Bottom	-0.013	185.35	-0.035	-7.4838	-0.1933	8628.2982
SUB LVL-2	SW4	EQY3	Top	-0.01	150.846	-0.006	-22.1721	0.0847	5455.0867
SUB LVL-2	SW4	EQY3	Bottom	-0.01	150.846	-0.006	-22.1721	0.0243	6963.5482
SUB LVL-2	SW4	Wind-X	Top	-0.172	1.029	-0.248	0.9003	-0.5156	80.5035
SUB LVL-2	SW4	Wind-X	Bottom	-0.172	1.029	-0.248	0.9003	-2.9922	90.7935
SUB LVL-2	SW4	Wind-Y	Top	-0.006	73.743	-0.008	-2.9592	0.0985	2552.4968
SUB LVL-2	SW4	Wind-Y	Bottom	-0.006	73.743	-0.008	-2.9592	0.0231	3289.9295
SUB LVL-2	LW1	Dead	Top	-649.622	-2.371	-0.184	-2.1353	-5.6896	-66.0595
SUB LVL-2	LW1	Dead	Bottom	-697.499	-2.371	-0.184	-2.1807	-7.5266	75.0146
SUB LVL-2	LW1	Extra Dead	Top	-15.605	0.137	-0.264	7.7693	-16.0582	10.0066
SUB LVL-2	LW1	Extra Dead	Bottom	-15.605	0.137	-0.264	7.7042	-18.6947	15.2351
SUB LVL-2	LW1	EQX1	Top	489.595	371.68	-0.147	6.5771	-4.665	4281.959
SUB LVL-2	LW1	EQX1	Bottom	489.595	371.68	-0.147	6.5407	-6.1388	7877.788
SUB LVL-2	LW1	EQX2	Top	489.767	371.754	-0.054	2.4453	-2.5157	4282.2876
SUB LVL-2	LW1	EQX2	Bottom	489.767	371.754	-0.054	2.432	-3.0531	7878.8091
SUB LVL-2	LW1	EQX3	Top	489.423	371.607	-0.241	10.7089	-6.8142	4281.6304
SUB LVL-2	LW1	EQX3	Bottom	489.423	371.607	-0.241	10.6493	-9.2245	7876.7669
SUB LVL-2	LW1	EQY1	Top	-2.296	0.848	1.926	-12.9687	47.9191	-1.4757
SUB LVL-2	LW1	EQY1	Bottom	-2.296	0.848	1.926	-12.4929	67.1763	7.5728
SUB LVL-2	LW1	EQY2	Top	-2.694	0.789	1.788	-6.7818	44.6096	-3.2152
SUB LVL-2	LW1	EQY2	Bottom	-2.694	0.789	1.788	-6.3399	62.494	5.3399
SUB LVL-2	LW1	EQY3	Top	-1.897	0.907	2.063	-19.1557	51.2285	0.2638
SUB LVL-2	LW1	EQY3	Bottom	-1.897	0.907	2.063	-18.6459	71.8586	9.8058
SUB LVL-2	LW1	Wind-X	Top	68.313	56.598	-0.023	0.5595	-0.2943	512.1049
SUB LVL-2	LW1	Wind-X	Bottom	68.313	56.598	-0.023	0.5538	-0.5269	1061.2069
SUB LVL-2	LW1	Wind-Y	Top	-1.777	0.711	0.675	-2.6724	15.6525	0.4697
SUB LVL-2	LW1	Wind-Y	Bottom	-1.777	0.711	0.675	-2.5057	22.3988	8.021
SUB LVL-2	LW2	Dead	Top	-658.587	2.793	-0.205	-2.6605	-6.2181	72.6514
SUB LVL-2	LW2	Dead	Bottom	-706.464	2.793	-0.205	-2.6262	-8.2681	-12.2523
SUB LVL-2	LW2	Extra Dead	Top	-17.745	-0.117	-0.219	7.6909	-11.9533	0.3498
SUB LVL-2	LW2	Extra Dead	Bottom	-17.745	-0.117	-0.219	7.7275	-14.1422	-3.7852
SUB LVL-2	LW2	EQX1	Top	-489.596	371.423	-0.069	6.8098	-1.517	4232.5422
SUB LVL-2	LW2	EQX1	Bottom	-489.596	371.423	-0.069	6.8214	-2.2108	7865.0368
SUB LVL-2	LW2	EQX2	Top	-489.768	371.502	-0.028	2.705	-0.6903	4231.8642
SUB LVL-2	LW2	EQX2	Bottom	-489.768	371.502	-0.028	2.7096	-0.9671	7865.1224
SUB LVL-2	LW2	EQX3	Top	-489.424	371.344	-0.111	10.9147	-2.3438	4233.2202
SUB LVL-2	LW2	EQX3	Bottom	-489.424	371.344	-0.111	10.9332	-3.4545	7864.9512
SUB LVL-2	LW2	EQY1	Top	2.347	0.492	1.95	-12.328	43.361	7.9205
SUB LVL-2	LW2	EQY1	Bottom	2.347	0.492	1.95	-12.6535	62.8593	13.2282
SUB LVL-2	LW2	EQY2	Top	2.745	0.373	1.889	-6.1793	42.0813	8.9777
SUB LVL-2	LW2	EQY2	Bottom	2.745	0.373	1.889	-6.4946	60.9671	13.1708
SUB LVL-2	LW2	EQY3	Top	1.948	0.61	2.011	-18.4767	44.6406	6.8633
SUB LVL-2	LW2	EQY3	Bottom	1.948	0.61	2.011	-18.8124	64.7515	13.2855

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-2	LW2	Wind-X	Top	-68.314	56.66	-0.015	0.6352	-0.3003	508.1062
SUB LVL-2	LW2	Wind-X	Bottom	-68.314	56.66	-0.015	0.6376	-0.4465	1063.3004
SUB LVL-2	LW2	Wind-Y	Top	1.796	0.331	0.73	-2.2246	14.9373	4.9356
SUB LVL-2	LW2	Wind-Y	Bottom	1.796	0.331	0.73	-2.3464	22.2349	8.5459
SUB LVL-2	LW3	Dead	Top	-687.696	-3.951	-0.188	-2.2062	-7.7699	-98.7385
SUB LVL-2	LW3	Dead	Bottom	-735.501	-3.951	-0.188	-2.2539	-9.6452	40.9453
SUB LVL-2	LW3	Extra Dead	Top	-17.9	-0.167	-0.107	7.761	-8.4564	-7.1721
SUB LVL-2	LW3	Extra Dead	Bottom	-17.9	-0.167	-0.107	7.7337	-9.5289	-4.2877
SUB LVL-2	LW3	EQX1	Top	482.34	370.295	0.051	6.6296	0.0735	4232.5471
SUB LVL-2	LW3	EQX1	Bottom	482.34	370.295	0.051	6.6425	0.5795	7812.8983
SUB LVL-2	LW3	EQX2	Top	482.092	370.305	0.042	2.5825	-0.203	4232.1269
SUB LVL-2	LW3	EQX2	Bottom	482.092	370.305	0.042	2.5933	0.2214	7812.6413
SUB LVL-2	LW3	EQX3	Top	482.589	370.285	0.059	10.6768	0.3499	4232.9673
SUB LVL-2	LW3	EQX3	Bottom	482.589	370.285	0.059	10.6918	0.9375	7813.1553
SUB LVL-2	LW3	EQY1	Top	2.207	0.315	1.528	-13.7687	39.0725	0.2836
SUB LVL-2	LW3	EQY1	Bottom	2.207	0.315	1.528	-13.3803	54.3552	2.8716
SUB LVL-2	LW3	EQY2	Top	2.726	0.283	1.54	-7.7037	39.5061	1.321
SUB LVL-2	LW3	EQY2	Bottom	2.726	0.283	1.54	-7.3123	54.9039	3.4607
SUB LVL-2	LW3	EQY3	Top	1.687	0.347	1.517	-19.8338	38.6388	-0.7538
SUB LVL-2	LW3	EQY3	Bottom	1.687	0.347	1.517	-19.4483	53.8066	2.2825
SUB LVL-2	LW3	Wind-X	Top	67.257	56.533	0.005	0.6123	-0.0098	509.7259
SUB LVL-2	LW3	Wind-X	Bottom	67.257	56.533	0.005	0.6137	0.0436	1057.9649
SUB LVL-2	LW3	Wind-Y	Top	1.759	0.047	0.572	-2.9084	13.9826	0.5562
SUB LVL-2	LW3	Wind-Y	Bottom	1.759	0.047	0.572	-2.7631	19.7018	0.5782
SUB LVL-2	LW4	Dead	Top	-681.775	3.776	-0.157	-2.4699	-8.4808	8.1521
SUB LVL-2	LW4	Dead	Bottom	-729.652	3.776	-0.157	-2.4437	-10.0511	-70.8004
SUB LVL-2	LW4	Extra Dead	Top	-14.581	0.026	-0.055	7.6073	-4.3615	-2.6556
SUB LVL-2	LW4	Extra Dead	Bottom	-14.581	0.026	-0.055	7.6165	-4.9115	-4.8348
SUB LVL-2	LW4	EQX1	Top	-482.406	373.619	0.119	6.8135	3.2864	4221.7736
SUB LVL-2	LW4	EQX1	Bottom	-482.406	373.619	0.119	6.7935	4.4799	7877.4323
SUB LVL-2	LW4	EQX2	Top	-482.157	373.547	0.06	2.7093	1.7038	4222.1578
SUB LVL-2	LW4	EQX2	Bottom	-482.157	373.547	0.06	2.6994	2.2996	7877.1291
SUB LVL-2	LW4	EQX3	Top	-482.654	373.692	0.179	10.9176	4.869	4221.3894
SUB LVL-2	LW4	EQX3	Bottom	-482.654	373.692	0.179	10.8877	6.6603	7877.7354
SUB LVL-2	LW4	EQY1	Top	-2.149	-0.242	1.363	-12.0532	34.1555	-15.8159
SUB LVL-2	LW4	EQY1	Bottom	-2.149	-0.242	1.363	-12.2808	47.7893	-18.5992
SUB LVL-2	LW4	EQY2	Top	-2.668	-0.168	1.45	-5.9	36.5962	-15.6818
SUB LVL-2	LW4	EQY2	Bottom	-2.668	-0.168	1.45	-6.1421	51.1009	-17.8041
SUB LVL-2	LW4	EQY3	Top	-1.631	-0.317	1.276	-18.2064	31.7148	-15.9499
SUB LVL-2	LW4	EQY3	Bottom	-1.631	-0.317	1.276	-18.4195	44.4776	-19.3942
SUB LVL-2	LW4	Wind-X	Top	-67.266	57.201	0.013	0.5984	0.3109	509.7335
SUB LVL-2	LW4	Wind-X	Bottom	-67.266	57.201	0.013	0.5963	0.4365	1070.5183
SUB LVL-2	LW4	Wind-Y	Top	-1.738	-0.458	0.56	-1.9751	13.1522	-7.1478
SUB LVL-2	LW4	Wind-Y	Bottom	-1.738	-0.458	0.56	-2.0686	18.7511	-12.0222
SUB LVL-2	SW5	Dead	Top	-860.235	15.036	-0.012	-4.3814	0.1529	-2509.1487

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-2	SW5	Dead	Bottom	-916.681	15.036	-0.012	-4.3814	0.0336	-2356.9873
SUB LVL-2	SW5	Extra Dead	Top	-38.613	3.83	-0.007	15.7624	-0.5328	252.5153
SUB LVL-2	SW5	Extra Dead	Bottom	-38.613	3.83	-0.007	15.7624	-0.6071	290.816
SUB LVL-2	SW5	EQX1	Top	5.946E-05	34.665	-2.614	12.3409	-18.536	1543.3556
SUB LVL-2	SW5	EQX1	Bottom	5.946E-05	34.665	-2.769	14.097	-45.5158	1890.0017
SUB LVL-2	SW5	EQX2	Top	2.71E-05	10.486	-2.603	3.802	-18.3883	761.805
SUB LVL-2	SW5	EQX2	Bottom	2.71E-05	10.486	-2.757	5.5581	-45.2507	866.6611
SUB LVL-2	SW5	EQX3	Top	9.182E-05	58.844	-2.626	20.8798	-18.6838	2324.9061
SUB LVL-2	SW5	EQX3	Bottom	9.182E-05	58.844	-2.781	22.6359	-45.7808	2913.3423
SUB LVL-2	SW5	EQY1	Top	0.0002689	205.119	0.055	-24.3239	0.7629	6407.2773
SUB LVL-2	SW5	EQY1	Bottom	0.0002689	205.243	0.055	-24.3239	1.3147	8459.1403
SUB LVL-2	SW5	EQY2	Top	0.000318	240.753	0.038	-11.4819	0.5361	7601.9879
SUB LVL-2	SW5	EQY2	Bottom	0.000318	240.876	0.038	-11.4819	0.9135	10010.1822
SUB LVL-2	SW5	EQY3	Top	0.0002199	169.486	0.073	-37.166	0.9897	5212.5666
SUB LVL-2	SW5	EQY3	Bottom	0.0002199	169.61	0.073	-37.166	1.7159	6908.0984
SUB LVL-2	SW5	Wind-X	Top	5.794E-06	3.017	-0.387	1.2214	-1.2097	160.1511
SUB LVL-2	SW5	Wind-X	Bottom	5.794E-06	3.017	-0.387	1.2214	-5.0828	190.3164
SUB LVL-2	SW5	Wind-Y	Top	0.0001248	96.601	0.023	-3.037	0.2226	2892.6086
SUB LVL-2	SW5	Wind-Y	Bottom	0.0001248	96.601	0.023	-3.037	0.4532	3858.6207
SUB LVL-2	SW3	Dead	Top	-1178.51	4.439	0.007	-2.473	-0.0609	-394.8318
SUB LVL-2	SW3	Dead	Bottom	-1216.643	4.439	0.007	-2.473	0.0101	-338.2669
SUB LVL-2	SW3	Extra Dead	Top	-61.786	-11.047	0.008	7.9389	0.0079	-1142.1351
SUB LVL-2	SW3	Extra Dead	Bottom	-61.786	-11.047	0.008	7.9389	0.0911	-1252.6059
SUB LVL-2	SW3	EQX1	Top	-0.009	-1.447	-1.455	6.3905	-8.7126	-62.6138
SUB LVL-2	SW3	EQX1	Bottom	-0.009	-1.447	-1.455	6.3905	-23.267	-77.0884
SUB LVL-2	SW3	EQX2	Top	-0.01	-0.604	-1.458	2.0809	-8.72	-29.7766
SUB LVL-2	SW3	EQX2	Bottom	-0.01	-0.604	-1.458	2.0809	-23.2981	-35.8127
SUB LVL-2	SW3	EQX3	Top	-0.008	-2.291	-1.453	10.7001	-8.7052	-95.451
SUB LVL-2	SW3	EQX3	Bottom	-0.008	-2.291	-1.453	10.7001	-23.2358	-118.3642
SUB LVL-2	SW3	EQY1	Top	-0.093	146.11	-0.022	-12.9835	0.0288	5212.655
SUB LVL-2	SW3	EQY1	Bottom	-0.093	146.11	-0.022	-12.9835	-0.1914	6673.7504
SUB LVL-2	SW3	EQY2	Top	-0.091	144.806	-0.018	-6.5472	0.0405	5163.3811
SUB LVL-2	SW3	EQY2	Bottom	-0.091	144.806	-0.018	-6.5472	-0.1444	6611.4443
SUB LVL-2	SW3	EQY3	Top	-0.095	147.413	-0.026	-19.4199	0.0171	5261.9289
SUB LVL-2	SW3	EQY3	Bottom	-0.095	147.413	-0.026	-19.4199	-0.2383	6736.0564
SUB LVL-2	SW3	Wind-X	Top	-0.001	-0.124	-0.226	0.5804	-0.4991	-8.3909
SUB LVL-2	SW3	Wind-X	Bottom	-0.001	-0.124	-0.226	0.5804	-2.76	-9.6344
SUB LVL-2	SW3	Wind-Y	Top	-0.032	57.591	-0.011	-2.7738	0.0188	1900.289
SUB LVL-2	SW3	Wind-Y	Bottom	-0.032	57.591	-0.011	-2.7738	-0.0961	2476.1953
SUB LVL-3	WP1	Dead	Top	-321.94	13.193	0.038	-0.1687	-0.3269	-35.2925
SUB LVL-3	WP1	Dead	Bottom	-330.815	13.193	0.038	-0.1687	0.0572	97.259
SUB LVL-3	WP1	Extra Dead	Top	-7.787	-0.864	0.027	0.7658	0.7579	-86.6489
SUB LVL-3	WP1	Extra Dead	Bottom	-7.787	-0.864	0.027	0.7658	1.023	-95.2901
SUB LVL-3	WP1	EQX1	Top	-0.005	-0.798	-0.203	0.7876	-1.9915	-35.2913
SUB LVL-3	WP1	EQX1	Bottom	-0.005	-0.798	-0.203	0.7876	-4.0259	-43.2715

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	WP1	EQX2	Top	-0.002	-0.224	-0.215	0.3419	-2.2918	-15.6398
SUB LVL-3	WP1	EQX2	Bottom	-0.002	-0.224	-0.215	0.3419	-4.445	-17.8765
SUB LVL-3	WP1	EQX3	Top	-0.008	-1.372	-0.192	1.2333	-1.6912	-54.9428
SUB LVL-3	WP1	EQX3	Bottom	-0.008	-1.372	-0.192	1.2333	-3.6068	-68.6666
SUB LVL-3	WP1	EQY1	Top	0.039	7.331	-0.115	-1.5078	-1.0545	271.1535
SUB LVL-3	WP1	EQY1	Bottom	0.039	7.331	-0.115	-1.5078	-2.2034	344.4619
SUB LVL-3	WP1	EQY2	Top	0.035	6.494	-0.097	-0.8446	-0.5988	241.3002
SUB LVL-3	WP1	EQY2	Bottom	0.035	6.494	-0.097	-0.8446	-1.5737	306.2371
SUB LVL-3	WP1	EQY3	Top	0.043	8.168	-0.132	-2.171	-1.5101	301.0067
SUB LVL-3	WP1	EQY3	Bottom	0.043	8.168	-0.132	-2.171	-2.8332	382.6867
SUB LVL-3	WP1	Wind-X	Top	-0.001	-0.074	-0.064	-0.0624	-0.206	-3.3943
SUB LVL-3	WP1	Wind-X	Bottom	-0.001	-0.074	-0.064	-0.0624	-0.8492	-4.1373
SUB LVL-3	WP1	Wind-Y	Top	0.013	2.806	-0.053	-0.3884	-0.2066	88.147
SUB LVL-3	WP1	Wind-Y	Bottom	0.013	2.806	-0.053	-0.3884	-0.7348	116.2082
SUB LVL-3	WP3	Dead	Top	-619.613	1.894	-0.073	-0.8874	0.4213	-304.97
SUB LVL-3	WP3	Dead	Bottom	-652.082	1.894	-0.073	-0.8874	-0.309	-286.0283
SUB LVL-3	WP3	Extra Dead	Top	-885.052	-14.51	-0.01	2.951	-2.5848	-1888.1515
SUB LVL-3	WP3	Extra Dead	Bottom	-885.052	-14.51	-0.01	2.951	-2.6805	-2033.251
SUB LVL-3	WP3	EQX1	Top	1.949E-05	-12.821	-1.927	1.5037	-12.6209	-831.5434
SUB LVL-3	WP3	EQX1	Bottom	1.949E-05	-12.821	-1.927	1.5037	-31.894	-959.7531
SUB LVL-3	WP3	EQX2	Top	9.122E-06	-1.176	-1.896	-0.1646	-11.7037	-387.4319
SUB LVL-3	WP3	EQX2	Bottom	9.122E-06	-1.176	-1.896	-0.1646	-30.6663	-399.1951
SUB LVL-3	WP3	EQX3	Top	2.986E-05	-24.466	-1.958	3.172	-13.5381	-1275.655
SUB LVL-3	WP3	EQX3	Bottom	2.986E-05	-24.466	-1.958	3.172	-33.1218	-1520.3111
SUB LVL-3	WP3	EQY1	Top	-0.0001422	144.143	-0.475	-5.0725	5.4141	6150.7148
SUB LVL-3	WP3	EQY1	Bottom	-0.0001422	144.143	-0.475	-5.0725	0.667	7592.1443
SUB LVL-3	WP3	EQY2	Top	-0.0001264	127.223	-0.521	-2.5797	4.0279	5476.217
SUB LVL-3	WP3	EQY2	Bottom	-0.0001264	127.223	-0.521	-2.5797	-1.1794	6748.4518
SUB LVL-3	WP3	EQY3	Top	-0.0001579	161.062	-0.429	-7.5654	6.8002	6825.2126
SUB LVL-3	WP3	EQY3	Bottom	-0.0001579	161.062	-0.429	-7.5654	2.5133	8435.8368
SUB LVL-3	WP3	Wind-X	Top	0	-0.973	-0.32	-0.0664	-0.6177	-81.7789
SUB LVL-3	WP3	Wind-X	Bottom	0	-0.973	-0.32	-0.0664	-3.8177	-91.5128
SUB LVL-3	WP3	Wind-Y	Top	-4.8E-05	55.559	-0.283	-0.9961	1.6973	2018.351
SUB LVL-3	WP3	Wind-Y	Bottom	-4.8E-05	55.559	-0.283	-0.9961	-1.1302	2573.9416
SUB LVL-3	WP4	Dead	Top	-160.354	-2.609	-0.01	-0.2158	0.4139	-16.8366
SUB LVL-3	WP4	Dead	Bottom	-169.635	-2.609	-0.01	-0.2158	0.3165	-43.2284
SUB LVL-3	WP4	Extra Dead	Top	-172.942	-3.77	-0.046	0.7597	-0.9425	-100.2288
SUB LVL-3	WP4	Extra Dead	Bottom	-172.942	-3.77	-0.046	0.7597	-1.3977	-137.9317
SUB LVL-3	WP4	EQX1	Top	0.013	0.093	-0.717	0.8108	-3.2776	-43.7946
SUB LVL-3	WP4	EQX1	Bottom	0.013	0.093	-0.717	0.8108	-10.4482	-42.8684
SUB LVL-3	WP4	EQX2	Top	0.006	0.292	-0.683	0.3496	-2.8978	-20.008
SUB LVL-3	WP4	EQX2	Bottom	0.006	0.292	-0.683	0.3496	-9.7297	-17.0916
SUB LVL-3	WP4	EQX3	Top	0.02	-0.106	-0.751	1.272	-3.6574	-67.5812
SUB LVL-3	WP4	EQX3	Bottom	0.02	-0.106	-0.751	1.272	-11.1667	-68.6451
SUB LVL-3	WP4	EQY1	Top	-0.095	2.885	0.025	-1.4839	1.7794	327.5276

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	WP4	EQY1	Bottom	-0.095	2.885	0.025	-1.4839	2.034	356.3729
SUB LVL-3	WP4	EQY2	Top	-0.085	2.595	-0.025	-0.7986	1.2033	291.5444
SUB LVL-3	WP4	EQY2	Bottom	-0.085	2.595	-0.025	-0.7986	0.9552	317.4927
SUB LVL-3	WP4	EQY3	Top	-0.106	3.174	0.076	-2.1692	2.3555	363.5109
SUB LVL-3	WP4	EQY3	Bottom	-0.106	3.174	0.076	-2.1692	3.1128	395.2531
SUB LVL-3	WP4	Wind-X	Top	0.001	0.015	-0.097	-0.1037	-0.2638	-4.5137
SUB LVL-3	WP4	Wind-X	Bottom	0.001	0.015	-0.097	-0.1037	-1.2368	-4.3656
SUB LVL-3	WP4	Wind-Y	Top	-0.032	1.058	-0.013	-0.3797	0.4568	107.2352
SUB LVL-3	WP4	Wind-Y	Bottom	-0.032	1.058	-0.013	-0.3797	0.3314	117.8142
SUB LVL-3	WP5	Dead	Top	-355.47	-15.044	-0.035	-0.3581	0.482	-33.1597
SUB LVL-3	WP5	Dead	Bottom	-368.314	-15.044	-0.035	-0.3581	0.1363	-184.256
SUB LVL-3	WP5	Extra Dead	Top	-8.168	0.102	-0.041	1.5948	-1.9431	7.1917
SUB LVL-3	WP5	Extra Dead	Bottom	-8.168	0.102	-0.041	1.5948	-2.351	8.212
SUB LVL-3	WP5	EQX1	Top	-0.007	0.548	-0.687	1.3846	-7.9123	48.7656
SUB LVL-3	WP5	EQX1	Bottom	-0.007	0.548	-0.687	1.3846	-14.7814	54.2418
SUB LVL-3	WP5	EQX2	Top	-0.003	-0.149	-0.651	0.4289	-7.1681	24.5598
SUB LVL-3	WP5	EQX2	Bottom	-0.003	-0.149	-0.651	0.4289	-13.6778	23.0712
SUB LVL-3	WP5	EQX3	Top	-0.01	1.244	-0.723	2.3403	-8.6566	72.9713
SUB LVL-3	WP5	EQX3	Bottom	-0.01	1.244	-0.723	2.3403	-15.885	85.4124
SUB LVL-3	WP5	EQY1	Top	-0.03	6.299	0.113	-2.4358	3.1649	193.4829
SUB LVL-3	WP5	EQY1	Bottom	-0.03	6.299	0.113	-2.4358	4.2935	256.4701
SUB LVL-3	WP5	EQY2	Top	-0.036	7.314	0.06	-1.0126	2.0348	230.2721
SUB LVL-3	WP5	EQY2	Bottom	-0.036	7.314	0.06	-1.0126	2.6352	303.4156
SUB LVL-3	WP5	EQY3	Top	-0.025	5.283	0.166	-3.859	4.295	156.6937
SUB LVL-3	WP5	EQY3	Bottom	-0.025	5.283	0.166	-3.859	5.9518	209.5247
SUB LVL-3	WP5	Wind-X	Top	-0.001	-0.015	-0.262	0.2667	-0.7819	5.1497
SUB LVL-3	WP5	Wind-X	Bottom	-0.001	-0.015	-0.262	0.2667	-3.4046	4.996
SUB LVL-3	WP5	Wind-Y	Top	-0.014	3.034	0.05	-0.3145	0.6764	85.1253
SUB LVL-3	WP5	Wind-Y	Bottom	-0.014	3.034	0.05	-0.3145	1.1751	115.4697
SUB LVL-3	WP6	Dead	Top	-410.836	-3.243	0.028	-1.7403	0.1174	-657.9007
SUB LVL-3	WP6	Dead	Bottom	-444.117	-3.243	0.028	-1.7403	0.3936	-690.3325
SUB LVL-3	WP6	Extra Dead	Top	-46.46	1.346	-0.018	4.3575	2.3968	79.5265
SUB LVL-3	WP6	Extra Dead	Bottom	-46.46	1.346	-0.018	4.3575	2.2196	92.9891
SUB LVL-3	WP6	EQX1	Top	-4.668E-05	10.143	-1.12	3.808	-17.1523	481.3775
SUB LVL-3	WP6	EQX1	Bottom	-4.668E-05	10.143	-1.278	3.9364	-29.1441	582.8105
SUB LVL-3	WP6	EQX2	Top	-2.118E-05	2.394	-1.183	1.2239	-18.0826	221.776
SUB LVL-3	WP6	EQX2	Bottom	-2.118E-05	2.394	-1.341	1.3523	-30.6985	245.7134
SUB LVL-3	WP6	EQX3	Top	-7.218E-05	17.893	-1.058	6.392	-16.2219	740.9789
SUB LVL-3	WP6	EQX3	Bottom	-7.218E-05	17.893	-1.216	6.5205	-27.5897	919.9076
SUB LVL-3	WP6	EQY1	Top	-0.0002122	67.691	0.504	-7.1958	-2.6768	2132.0733
SUB LVL-3	WP6	EQY1	Bottom	-0.0002122	67.817	0.504	-7.1958	2.363	2809.6119
SUB LVL-3	WP6	EQY2	Top	-0.0002508	79.002	0.596	-3.3285	-1.2635	2526.41
SUB LVL-3	WP6	EQY2	Bottom	-0.0002508	79.129	0.596	-3.3285	4.6974	3317.0638
SUB LVL-3	WP6	EQY3	Top	-0.0001735	56.379	0.412	-11.0632	-4.0901	1737.7366
SUB LVL-3	WP6	EQY3	Bottom	-0.0001735	56.506	0.412	-11.0632	0.0286	2302.16

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	WP6	Wind-X	Top	0	0.528	-0.139	0.0317	-1.3579	49.6488
SUB LVL-3	WP6	Wind-X	Bottom	0	0.528	-0.139	0.0317	-2.7524	54.9314
SUB LVL-3	WP6	Wind-Y	Top	-9.861E-05	33.575	0.281	-1.245	0.2339	954.0423
SUB LVL-3	WP6	Wind-Y	Bottom	-9.861E-05	33.575	0.281	-1.245	3.0402	1289.7876
SUB LVL-3	SW1	Dead	Top	-1030.608	-16.493	-0.072	-1.5644	-0.3264	-447.0207
SUB LVL-3	SW1	Dead	Bottom	-1076.025	-16.493	-0.072	-1.5644	-1.0428	-611.9501
SUB LVL-3	SW1	Extra Dead	Top	-435.495	1.632	0.117	6.6263	-0.0035	-3182.3526
SUB LVL-3	SW1	Extra Dead	Bottom	-435.495	1.632	0.117	6.6263	1.1676	-3166.0285
SUB LVL-3	SW1	EQX1	Top	5.602E-05	-21.144	-1.777	1.9834	-29.0509	-1272.6411
SUB LVL-3	SW1	EQX1	Bottom	5.602E-05	-21.144	-1.777	1.9834	-46.821	-1484.077
SUB LVL-3	SW1	EQX2	Top	2.616E-05	-3.934	-1.822	-1.7381	-29.1778	-581.0727
SUB LVL-3	SW1	EQX2	Bottom	2.616E-05	-3.934	-1.822	-1.7381	-47.3973	-620.4085
SUB LVL-3	SW1	EQX3	Top	8.588E-05	-38.354	-1.732	5.7049	-28.9239	-1964.2095
SUB LVL-3	SW1	EQX3	Bottom	8.588E-05	-38.354	-1.732	5.7049	-46.2447	-2347.7455
SUB LVL-3	SW1	EQY1	Top	-0.0004091	213.212	-0.649	-9.3618	-0.1176	9549.9393
SUB LVL-3	SW1	EQY1	Bottom	-0.0004091	213.212	-0.649	-9.3618	-6.6038	11682.0569
SUB LVL-3	SW1	EQY2	Top	-0.0003637	188.137	-0.581	-3.7872	0.0738	8500.4428
SUB LVL-3	SW1	EQY2	Bottom	-0.0003637	188.137	-0.581	-3.7872	-5.734	10381.8146
SUB LVL-3	SW1	EQY3	Top	-0.0004545	238.286	-0.716	-14.9363	-0.309	10599.4358
SUB LVL-3	SW1	EQY3	Bottom	-0.0004545	238.286	-0.716	-14.9363	-7.4737	12982.2991
SUB LVL-3	SW1	Wind-X	Top	5.61E-06	-1.891	-0.435	-0.5079	-3.3028	-120.7193
SUB LVL-3	SW1	Wind-X	Bottom	5.61E-06	-1.891	-0.435	-0.5079	-7.6535	-139.6286
SUB LVL-3	SW1	Wind-Y	Top	-0.0001379	81.471	-0.344	-1.1067	0.0264	3150.1904
SUB LVL-3	SW1	Wind-Y	Bottom	-0.0001379	81.471	-0.344	-1.1067	-3.4133	3964.9032
SUB LVL-3	SW2	Dead	Top	-1654.221	0.329	0.013	-2.3742	-0.2644	-961.5897
SUB LVL-3	SW2	Dead	Bottom	-1695.021	0.329	0.013	-2.3742	-0.1305	-957.5042
SUB LVL-3	SW2	Extra Dead	Top	-981.037	32.765	-0.085	5.9184	0.0153	-4218.1559
SUB LVL-3	SW2	Extra Dead	Bottom	-981.037	32.765	-0.085	5.9184	-0.8382	-3890.5035
SUB LVL-3	SW2	EQX1	Top	1.479	-22.003	-0.392	14.1738	-23.0448	-1174.8708
SUB LVL-3	SW2	EQX1	Bottom	1.479	-22.003	-0.392	14.1738	-26.9646	-1394.9014
SUB LVL-3	SW2	EQX2	Top	1.479	-7.194	-0.393	10.4631	-23.0375	-536.235
SUB LVL-3	SW2	EQX2	Bottom	1.479	-7.194	-0.393	10.4631	-26.9683	-608.1764
SUB LVL-3	SW2	EQX3	Top	1.479	-36.812	-0.391	17.8846	-23.0521	-1813.5067
SUB LVL-3	SW2	EQX3	Bottom	1.479	-36.812	-0.391	17.8846	-26.9609	-2181.6264
SUB LVL-3	SW2	EQY1	Top	-0.006	251.887	0.329	-9.6681	-0.9308	11536.6095
SUB LVL-3	SW2	EQY1	Bottom	-0.006	251.887	0.329	-9.6681	2.3603	14055.4769
SUB LVL-3	SW2	EQY2	Top	-0.007	230.106	0.331	-4.1423	-0.943	10568.4899
SUB LVL-3	SW2	EQY2	Bottom	-0.007	230.106	0.331	-4.1423	2.3692	12869.5518
SUB LVL-3	SW2	EQY3	Top	-0.005	273.667	0.327	-15.1939	-0.9186	12504.7291
SUB LVL-3	SW2	EQY3	Bottom	-0.005	273.667	0.327	-15.1939	2.3514	15241.4019
SUB LVL-3	SW2	Wind-X	Top	0.212	-1.916	0.137	2.1185	-3.0309	-115.727
SUB LVL-3	SW2	Wind-X	Bottom	0.212	-1.916	0.137	2.1185	-1.6643	-134.8838
SUB LVL-3	SW2	Wind-Y	Top	-0.004	95.872	0.181	-1.8244	-0.614	3964.576
SUB LVL-3	SW2	Wind-Y	Bottom	-0.004	95.872	0.181	-1.8244	1.1927	4923.2974
SUB LVL-3	SW4	Dead	Top	-1580.021	10.065	-0.066	-1.8309	0.1984	-1815.2201

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	SW4	Dead	Bottom	-1623.988	10.065	-0.066	-1.8309	-0.4621	-1711.8956
SUB LVL-3	SW4	Extra Dead	Top	-103.778	-6.366	0.015	6.5303	-0.0511	-354.0864
SUB LVL-3	SW4	Extra Dead	Bottom	-103.778	-6.366	0.015	6.5303	0.1027	-417.7476
SUB LVL-3	SW4	EQX1	Top	-1.374	17.112	-1.045	5.5576	-25.7972	1008.0702
SUB LVL-3	SW4	EQX1	Bottom	-1.374	17.112	-1.045	5.5576	-36.2507	1179.1894
SUB LVL-3	SW4	EQX2	Top	-1.373	4.41	-1.075	1.8641	-25.7236	459.9025
SUB LVL-3	SW4	EQX2	Bottom	-1.373	4.41	-1.075	1.8641	-36.476	504.0027
SUB LVL-3	SW4	EQX3	Top	-1.375	29.814	-1.015	9.251	-25.8707	1556.238
SUB LVL-3	SW4	EQX3	Bottom	-1.375	29.814	-1.015	9.251	-36.0255	1854.3762
SUB LVL-3	SW4	EQY1	Top	-0.012	172.67	0.279	-12.5553	-0.0839	7795.9227
SUB LVL-3	SW4	EQY1	Bottom	-0.012	172.67	0.279	-12.5553	2.7063	9522.6272
SUB LVL-3	SW4	EQY2	Top	-0.014	191.174	0.323	-7.0519	-0.1926	8628.2977
SUB LVL-3	SW4	EQY2	Bottom	-0.014	191.174	0.323	-7.0519	3.0422	10540.0411
SUB LVL-3	SW4	EQY3	Top	-0.011	154.167	0.235	-18.0587	0.0248	6963.5477
SUB LVL-3	SW4	EQY3	Bottom	-0.011	154.167	0.235	-18.0587	2.3705	8505.2134
SUB LVL-3	SW4	Wind-X	Top	-0.196	2.109	-0.215	0.1287	-2.9802	90.7934
SUB LVL-3	SW4	Wind-X	Bottom	-0.196	2.109	-0.215	0.1287	-5.1296	111.8856
SUB LVL-3	SW4	Wind-Y	Top	-0.007	80.723	0.159	-2.7602	0.0234	3289.9293
SUB LVL-3	SW4	Wind-Y	Bottom	-0.007	80.723	0.159	-2.7602	1.6138	4097.1556
SUB LVL-3	LW1	Dead	Top	-752.379	-1.743	0.785	-3.3546	-7.5266	-73.3407
SUB LVL-3	LW1	Dead	Bottom	-800.256	-1.743	0.785	-3.1606	0.326	99.4062
SUB LVL-3	LW1	Extra Dead	Top	-15.682	-0.219	0.244	4.634	-18.6947	10.0781
SUB LVL-3	LW1	Extra Dead	Bottom	-15.682	-0.219	0.244	4.6943	-16.2539	11.7641
SUB LVL-3	LW1	EQX1	Top	489.422	390.349	0.289	6.1288	-6.1388	7995.6428
SUB LVL-3	LW1	EQX1	Bottom	489.422	390.349	0.289	6.2002	-3.2489	11778.2093
SUB LVL-3	LW1	EQX2	Top	489.594	390.501	0.31	3.0535	-3.0531	7996.7072
SUB LVL-3	LW1	EQX2	Bottom	489.594	390.501	0.31	3.13	0.0459	11780.7468
SUB LVL-3	LW1	EQX3	Top	489.25	390.198	0.268	9.2041	-9.2245	7994.5784
SUB LVL-3	LW1	EQX3	Bottom	489.25	390.198	0.268	9.2704	-6.5437	11775.6718
SUB LVL-3	LW1	EQY1	Top	-2.294	0.257	0.549	-5.7366	67.1762	7.0311
SUB LVL-3	LW1	EQY1	Bottom	-2.294	0.257	0.549	-5.601	72.6672	10.1702
SUB LVL-3	LW1	EQY2	Top	-2.693	0.064	0.519	-1.1397	62.4939	4.6985
SUB LVL-3	LW1	EQY2	Bottom	-2.693	0.064	0.519	-1.0114	67.6856	6.0001
SUB LVL-3	LW1	EQY3	Top	-1.895	0.451	0.579	-10.3335	71.8585	9.3637
SUB LVL-3	LW1	EQY3	Bottom	-1.895	0.451	0.579	-10.1905	77.6488	14.3403
SUB LVL-3	LW1	Wind-X	Top	68.287	63.399	0.264	0.9013	-0.5269	1077.6226
SUB LVL-3	LW1	Wind-X	Bottom	68.287	63.399	0.264	0.9666	2.115	1694.7395
SUB LVL-3	LW1	Wind-Y	Top	-1.777	-0.147	0.358	0.2065	22.3988	7.5922
SUB LVL-3	LW1	Wind-Y	Bottom	-1.777	-0.147	0.358	0.295	25.9804	6.5565
SUB LVL-3	LW2	Dead	Top	-761.329	2.648	0.549	-1.9354	-8.2682	80.7109
SUB LVL-3	LW2	Dead	Bottom	-809.206	2.648	0.549	-2.027	-2.7828	-22.7956
SUB LVL-3	LW2	Extra Dead	Top	-17.75	-0.072	0.125	5.5268	-14.1422	-0.7391
SUB LVL-3	LW2	Extra Dead	Bottom	-17.75	-0.072	0.125	5.506	-12.8926	-4.4182
SUB LVL-3	LW2	EQX1	Top	-489.423	391.228	-0.1	5.4177	-2.2108	7943.6529
SUB LVL-3	LW2	EQX1	Bottom	-489.423	391.228	-0.1	5.4343	-3.206	11774.2253

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	LW2	EQX2	Top	-489.595	391.299	-0.075	2.1488	-0.9671	7943.7666
SUB LVL-3	LW2	EQX2	Bottom	-489.595	391.299	-0.075	2.1613	-1.7139	11775.0174
SUB LVL-3	LW2	EQX3	Top	-489.252	391.157	-0.124	8.6866	-3.4545	7943.5391
SUB LVL-3	LW2	EQX3	Bottom	-489.252	391.157	-0.124	8.7074	-4.6982	11773.4333
SUB LVL-3	LW2	EQY1	Top	2.352	-0.178	0.287	-11.8789	62.8591	12.7435
SUB LVL-3	LW2	EQY1	Bottom	2.352	-0.178	0.287	-11.9268	65.729	11.3517
SUB LVL-3	LW2	EQY2	Top	2.751	-0.282	0.251	-6.9971	60.9669	12.6205
SUB LVL-3	LW2	EQY2	Bottom	2.751	-0.282	0.251	-7.0389	63.4748	10.2602
SUB LVL-3	LW2	EQY3	Top	1.954	-0.075	0.323	-16.7608	64.7513	12.8665
SUB LVL-3	LW2	EQY3	Bottom	1.954	-0.075	0.323	-16.8147	67.9832	12.4432
SUB LVL-3	LW2	Wind-X	Top	-68.288	63.55	-0.067	0.483	-0.4465	1074.242
SUB LVL-3	LW2	Wind-X	Bottom	-68.288	63.55	-0.067	0.4942	-1.1159	1698.3403
SUB LVL-3	LW2	Wind-Y	Top	1.798	-0.171	0.158	-2.9781	22.2348	8.2115
SUB LVL-3	LW2	Wind-Y	Bottom	1.798	-0.171	0.158	-3.0045	23.8178	6.8041
SUB LVL-3	LW3	Dead	Top	-790.147	-3.227	0.322	-2.7703	-9.6454	-124.1583
SUB LVL-3	LW3	Dead	Bottom	-837.951	-3.227	0.322	-2.6886	-6.4285	48.8056
SUB LVL-3	LW3	Extra Dead	Top	-17.905	-0.071	0.006	5.0701	-9.5289	-8.9225
SUB LVL-3	LW3	Extra Dead	Bottom	-17.905	-0.071	0.006	5.0717	-9.4683	-5.0829
SUB LVL-3	LW3	EQX1	Top	482.172	389.616	0.139	6.0447	0.5795	7932.341
SUB LVL-3	LW3	EQX1	Bottom	482.172	389.616	0.139	6.0801	1.9722	11705.9435
SUB LVL-3	LW3	EQX2	Top	481.923	389.657	0.121	2.6844	0.2214	7932.0217
SUB LVL-3	LW3	EQX2	Bottom	481.923	389.657	0.121	2.7151	1.4285	11706.0936
SUB LVL-3	LW3	EQX3	Top	482.42	389.575	0.158	9.405	0.9375	7932.6602
SUB LVL-3	LW3	EQX3	Bottom	482.42	389.575	0.158	9.4451	2.516	11705.7933
SUB LVL-3	LW3	EQY1	Top	2.212	0.208	0.886	-4.9006	54.355	3.5285
SUB LVL-3	LW3	EQY1	Bottom	2.212	0.208	0.886	-4.6754	63.2148	5.0416
SUB LVL-3	LW3	EQY2	Top	2.731	0.137	0.913	0.1166	54.9036	4.248
SUB LVL-3	LW3	EQY2	Bottom	2.731	0.137	0.913	0.3488	64.0364	4.9198
SUB LVL-3	LW3	EQY3	Top	1.693	0.278	0.859	-9.9179	53.8064	2.8089
SUB LVL-3	LW3	EQY3	Bottom	1.693	0.278	0.859	-9.6996	62.3933	5.1635
SUB LVL-3	LW3	Wind-X	Top	67.232	62.964	0.087	0.5596	0.0436	1074.5915
SUB LVL-3	LW3	Wind-X	Bottom	67.232	62.964	0.087	0.5817	0.91	1687.1437
SUB LVL-3	LW3	Wind-Y	Top	1.761	0.215	0.495	0.4608	19.7017	1.0607
SUB LVL-3	LW3	Wind-Y	Bottom	1.761	0.215	0.495	0.5867	24.6531	2.7612
SUB LVL-3	LW4	Dead	Top	-784.965	2.432	0.098	-2.3485	-10.0511	18.5582
SUB LVL-3	LW4	Dead	Bottom	-832.842	2.432	0.098	-2.3649	-9.0688	-91.0561
SUB LVL-3	LW4	Extra Dead	Top	-14.588	-0.125	-0.017	5.6589	-4.9115	-2.2897
SUB LVL-3	LW4	Extra Dead	Bottom	-14.588	-0.125	-0.017	5.6616	-5.078	-5.9711
SUB LVL-3	LW4	EQX1	Top	-482.257	391.075	-0.307	5.1544	4.4799	7955.1623
SUB LVL-3	LW4	EQX1	Bottom	-482.257	391.075	-0.307	5.2057	1.4086	11785.3979
SUB LVL-3	LW4	EQX2	Top	-482.008	391.066	-0.345	2.1425	2.2996	7954.8194
SUB LVL-3	LW4	EQX2	Bottom	-482.008	391.066	-0.345	2.2001	-1.1553	11785.0105
SUB LVL-3	LW4	EQX3	Top	-482.505	391.083	-0.269	8.1664	6.6603	7955.5052
SUB LVL-3	LW4	EQX3	Bottom	-482.505	391.083	-0.269	8.2113	3.9725	11785.7854
SUB LVL-3	LW4	EQY1	Top	-2.148	1.255	0.928	-12.8936	47.7892	-18.2582



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	LW4	EQY1	Bottom	-2.148	1.255	0.928	-13.0485	57.0721	-6.067
SUB LVL-3	LW4	EQY2	Top	-2.667	1.243	0.984	-8.3906	51.1008	-17.3792
SUB LVL-3	LW4	EQY2	Bottom	-2.667	1.243	0.984	-8.5548	60.9374	-5.3973
SUB LVL-3	LW4	EQY3	Top	-1.63	1.267	0.873	-17.3965	44.4775	-19.1372
SUB LVL-3	LW4	EQY3	Bottom	-1.63	1.267	0.873	-17.5423	53.2068	-6.7367
SUB LVL-3	LW4	Wind-X	Top	-67.244	62.892	-0.041	0.5464	0.4365	1081.3325
SUB LVL-3	LW4	Wind-X	Bottom	-67.244	62.892	-0.041	0.5533	0.0232	1699.0232
SUB LVL-3	LW4	Wind-Y	Top	-1.737	0.791	0.445	-3.5988	18.7511	-11.741
SUB LVL-3	LW4	Wind-Y	Bottom	-1.737	0.791	0.445	-3.6731	23.2022	-4.1213
SUB LVL-3	SW5	Dead	Top	-1013.495	11.873	0.055	-5.7475	0.0336	-2745.9483
SUB LVL-3	SW5	Dead	Bottom	-1069.941	11.873	0.055	-5.7475	0.579	-2625.4147
SUB LVL-3	SW5	Extra Dead	Top	-42.307	2.414	-0.003	11.5405	-0.6071	313.1301
SUB LVL-3	SW5	Extra Dead	Bottom	-42.307	2.414	-0.003	11.5405	-0.6347	337.274
SUB LVL-3	SW5	EQX1	Top	6.632E-05	31.836	-2.895	8.9269	-45.5158	1890.0016
SUB LVL-3	SW5	EQX1	Bottom	6.632E-05	31.836	-3.009	10.224	-75.0782	2208.3615
SUB LVL-3	SW5	EQX2	Top	2.986E-05	7.481	-2.919	1.8355	-45.2507	866.661
SUB LVL-3	SW5	EQX2	Bottom	2.986E-05	7.481	-3.032	3.1326	-75.0508	941.4687
SUB LVL-3	SW5	EQX3	Top	0.0001028	56.191	-2.871	16.0184	-45.7808	2913.3421
SUB LVL-3	SW5	EQX3	Bottom	0.0001028	56.191	-2.985	17.3155	-75.1057	3475.2543
SUB LVL-3	SW5	EQY1	Top	0.0003035	211.902	0.415	-18.2425	1.3147	8459.1397
SUB LVL-3	SW5	EQY1	Bottom	0.0003035	211.993	0.415	-18.2425	5.4662	10578.6487
SUB LVL-3	SW5	EQY2	Top	0.0003587	247.585	0.45	-7.6111	0.9135	10010.1815
SUB LVL-3	SW5	EQY2	Bottom	0.0003587	247.676	0.45	-7.6111	5.4182	12486.5246
SUB LVL-3	SW5	EQY3	Top	0.0002483	176.218	0.38	-28.874	1.7159	6908.098
SUB LVL-3	SW5	EQY3	Bottom	0.0002483	176.309	0.38	-28.874	5.5143	8670.7729
SUB LVL-3	SW5	Wind-X	Top	6.422E-06	1.855	-0.767	1.7344	-5.0828	190.3164
SUB LVL-3	SW5	Wind-X	Bottom	6.422E-06	1.855	-0.767	1.7344	-12.7568	208.8651
SUB LVL-3	SW5	Wind-Y	Top	0.000141	104.266	0.226	-2.8251	0.4532	3858.6204
SUB LVL-3	SW5	Wind-Y	Bottom	0.000141	104.266	0.226	-2.8251	2.7175	4901.2836
SUB LVL-3	SW3	Dead	Top	-1358.257	1.556	0.029	-1.8278	-0.0657	-411.1886
SUB LVL-3	SW3	Dead	Bottom	-1396.39	1.556	0.029	-1.8278	0.2204	-383.4518
SUB LVL-3	SW3	Extra Dead	Top	-61.776	-7.004	0.008	6.0344	0.0911	-1252.6059
SUB LVL-3	SW3	Extra Dead	Bottom	-61.776	-7.004	0.008	6.0344	0.1666	-1322.6417
SUB LVL-3	SW3	EQX1	Top	-0.01	-0.765	-0.765	8.9461	-23.0839	-77.0884
SUB LVL-3	SW3	EQX1	Bottom	-0.01	-0.765	-0.765	8.9461	-30.7336	-84.7428
SUB LVL-3	SW3	EQX2	Top	-0.011	-0.347	-0.762	5.3113	-23.1151	-35.8127
SUB LVL-3	SW3	EQX2	Bottom	-0.011	-0.347	-0.762	5.3113	-30.7348	-39.2863
SUB LVL-3	SW3	EQX3	Top	-0.008	-1.184	-0.768	12.5809	-23.0527	-118.3642
SUB LVL-3	SW3	EQX3	Bottom	-0.008	-1.184	-0.768	12.5809	-30.7324	-130.1992
SUB LVL-3	SW3	EQY1	Top	-0.104	143.443	-0.012	-9.9015	-0.1915	6673.7504
SUB LVL-3	SW3	EQY1	Bottom	-0.104	143.443	-0.012	-9.9015	-0.3083	8108.1812
SUB LVL-3	SW3	EQY2	Top	-0.102	142.805	-0.016	-4.4948	-0.1445	6611.4443
SUB LVL-3	SW3	EQY2	Bottom	-0.102	142.805	-0.016	-4.4948	-0.3058	8039.4917
SUB LVL-3	SW3	EQY3	Top	-0.106	144.081	-0.007	-15.3082	-0.2384	6736.0564
SUB LVL-3	SW3	EQY3	Bottom	-0.106	144.081	-0.007	-15.3082	-0.3107	8176.8708

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-3	SW3	Wind-X	Top	-0.001	0.352	-0.047	0.7517	-2.7328	-9.6344
SUB LVL-3	SW3	Wind-X	Bottom	-0.001	0.352	-0.047	0.7517	-3.202	-6.114
SUB LVL-3	SW3	Wind-Y	Top	-0.036	60.492	0.005	-1.8624	-0.0961	2476.1953
SUB LVL-3	SW3	Wind-Y	Bottom	-0.036	60.492	0.005	-1.8624	-0.0434	3081.1187
SUB LVL-4	WP1	Dead	Top	-367.384	11.354	-0.056	-0.0332	0.0572	-33.9913
SUB LVL-4	WP1	Dead	Bottom	-376.259	11.354	-0.056	-0.0332	-0.5028	80.1726
SUB LVL-4	WP1	Extra Dead	Top	-7.788	-0.108	-0.026	0.5453	1.023	-95.2869
SUB LVL-4	WP1	Extra Dead	Bottom	-7.788	-0.108	-0.026	0.5453	0.7609	-96.3685
SUB LVL-4	WP1	EQX1	Top	-0.006	-1.022	-0.258	0.1884	-4.0259	-43.2696
SUB LVL-4	WP1	EQX1	Bottom	-0.006	-1.022	-0.258	0.1884	-6.6064	-53.4943
SUB LVL-4	WP1	EQX2	Top	-0.002	-0.558	-0.261	-0.1303	-4.445	-17.8757
SUB LVL-4	WP1	EQX2	Bottom	-0.002	-0.558	-0.261	-0.1303	-7.0517	-23.4564
SUB LVL-4	WP1	EQX3	Top	-0.009	-1.487	-0.255	0.507	-3.6068	-68.6635
SUB LVL-4	WP1	EQX3	Bottom	-0.009	-1.487	-0.255	0.507	-6.1611	-83.5321
SUB LVL-4	WP1	EQY1	Top	0.042	5.934	0.211	-1.511	-2.2035	344.4469
SUB LVL-4	WP1	EQY1	Bottom	0.042	5.934	0.211	-1.511	-0.0943	403.7906
SUB LVL-4	WP1	EQY2	Top	0.037	5.267	0.215	-1.0393	-1.5737	306.2238
SUB LVL-4	WP1	EQY2	Bottom	0.037	5.267	0.215	-1.0393	0.5721	358.8899
SUB LVL-4	WP1	EQY3	Top	0.047	6.602	0.207	-1.9827	-2.8332	382.67
SUB LVL-4	WP1	EQY3	Bottom	0.047	6.602	0.207	-1.9827	-0.7607	448.6913
SUB LVL-4	WP1	Wind-X	Top	-0.001	-0.102	0.041	-0.5438	-0.8492	-4.1371
SUB LVL-4	WP1	Wind-X	Bottom	-0.001	-0.102	0.041	-0.5438	-0.4343	-5.1539
SUB LVL-4	WP1	Wind-Y	Top	0.014	2.587	0.118	-0.5394	-0.7348	116.2029
SUB LVL-4	WP1	Wind-Y	Bottom	0.014	2.587	0.118	-0.5394	0.4483	142.0769
SUB LVL-4	WP3	Dead	Top	-702.886	8.956	0.015	-0.0981	-0.3091	-268.1127
SUB LVL-4	WP3	Dead	Bottom	-735.355	8.956	0.015	-0.0981	-0.1545	-178.5499
SUB LVL-4	WP3	Extra Dead	Top	-970.612	-7.787	0.134	1.0133	-2.6805	-1979.6039
SUB LVL-4	WP3	Extra Dead	Bottom	-970.612	-7.787	0.134	1.0133	-1.3403	-2057.4731
SUB LVL-4	WP3	EQX1	Top	2.064E-05	-18.437	1.736	1.4556	-31.894	-959.7529
SUB LVL-4	WP3	EQX1	Bottom	2.064E-05	-18.437	1.736	1.4556	-14.5354	-1144.1217
SUB LVL-4	WP3	EQX2	Top	9.534E-06	-5.759	1.674	0.7771	-30.6663	-399.195
SUB LVL-4	WP3	EQX2	Bottom	9.534E-06	-5.759	1.674	0.7771	-13.9216	-456.7855
SUB LVL-4	WP3	EQX3	Top	3.175E-05	-31.115	1.797	2.1341	-33.1218	-1520.3108
SUB LVL-4	WP3	EQX3	Bottom	3.175E-05	-31.115	1.797	2.1341	-15.1493	-1831.4579
SUB LVL-4	WP3	EQY1	Top	-0.0001517	146.991	-0.033	-1.1886	0.667	7592.1428
SUB LVL-4	WP3	EQY1	Bottom	-0.0001517	146.991	-0.033	-1.1886	0.3335	9062.0563
SUB LVL-4	WP3	EQY2	Top	-0.0001349	128.529	0.059	-0.1802	-1.1794	6748.4505
SUB LVL-4	WP3	EQY2	Bottom	-0.0001349	128.529	0.059	-0.1802	-0.5897	8033.739
SUB LVL-4	WP3	EQY3	Top	-0.0001686	165.454	-0.126	-2.197	2.5133	8435.8351
SUB LVL-4	WP3	EQY3	Bottom	-0.0001686	165.454	-0.126	-2.197	1.2567	10090.3736
SUB LVL-4	WP3	Wind-X	Top	0	-1.614	0.191	0.2251	-3.8177	-91.5128
SUB LVL-4	WP3	Wind-X	Bottom	0	-1.614	0.191	0.2251	-1.9088	-107.6555
SUB LVL-4	WP3	Wind-Y	Top	-5.144E-05	60.33	0.057	0.0399	-1.1302	2573.9411
SUB LVL-4	WP3	Wind-Y	Bottom	-5.144E-05	60.33	0.057	0.0399	-0.5651	3177.2451
SUB LVL-4	WP4	Dead	Top	-181.738	0.935	-0.016	0.2042	0.3165	-7.1669

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-4	WP4	Dead	Bottom	-193.644	0.935	-0.016	0.2042	0.1582	2.1857
SUB LVL-4	WP4	Extra Dead	Top	-189.665	3.1	0.07	0.5292	-1.3977	-94.203
SUB LVL-4	WP4	Extra Dead	Bottom	-189.665	3.1	0.07	0.5292	-0.6989	-63.2074
SUB LVL-4	WP4	EQX1	Top	0.014	-1.063	0.576	0.4837	-10.4482	-42.8646
SUB LVL-4	WP4	EQX1	Bottom	0.014	-1.063	0.576	0.4837	-4.6921	-53.4934
SUB LVL-4	WP4	EQX2	Top	0.006	-0.426	0.54	0.2038	-9.7297	-17.0901
SUB LVL-4	WP4	EQX2	Bottom	0.006	-0.426	0.54	0.2038	-4.3329	-21.3452
SUB LVL-4	WP4	EQX3	Top	0.021	-1.7	0.612	0.7636	-11.1668	-68.6391
SUB LVL-4	WP4	EQX3	Bottom	0.021	-1.7	0.612	0.7636	-5.0514	-85.6417
SUB LVL-4	WP4	EQY1	Top	-0.102	6.282	-0.102	0.0016	2.034	356.3429
SUB LVL-4	WP4	EQY1	Bottom	-0.102	6.282	-0.102	0.0016	1.017	419.1593
SUB LVL-4	WP4	EQY2	Top	-0.09	5.369	-0.048	0.4139	0.9552	317.4661
SUB LVL-4	WP4	EQY2	Bottom	-0.09	5.369	-0.048	0.4139	0.4776	371.156
SUB LVL-4	WP4	EQY3	Top	-0.113	7.194	-0.156	-0.4106	3.1128	395.2196
SUB LVL-4	WP4	EQY3	Bottom	-0.113	7.194	-0.156	-0.4106	1.5564	467.1627
SUB LVL-4	WP4	Wind-X	Top	0.001	-0.008	0.062	-0.2659	-1.2368	-4.3652
SUB LVL-4	WP4	Wind-X	Bottom	0.001	-0.008	0.062	-0.2659	-0.6184	-4.4466
SUB LVL-4	WP4	Wind-Y	Top	-0.034	3.132	-0.017	0.2943	0.3314	117.8035
SUB LVL-4	WP4	Wind-Y	Bottom	-0.034	3.132	-0.017	0.2943	0.1657	149.1278
SUB LVL-4	WP5	Dead	Top	-406.722	-12.877	0.126	-0.2782	0.1363	-39.8752
SUB LVL-4	WP5	Dead	Bottom	-419.566	-12.877	0.126	-0.2782	1.3945	-169.306
SUB LVL-4	WP5	Extra Dead	Top	-8.168	-0.093	0.089	0.7984	-2.351	8.212
SUB LVL-4	WP5	Extra Dead	Bottom	-8.168	-0.093	0.089	0.7984	-1.4647	7.2786
SUB LVL-4	WP5	EQX1	Top	-0.007	-0.025	0.125	0.4869	-14.7814	54.2394
SUB LVL-4	WP5	EQX1	Bottom	-0.007	-0.025	0.125	0.4869	-13.5272	53.9892
SUB LVL-4	WP5	EQX2	Top	-0.003	-0.718	0.109	-0.1709	-13.6778	23.0703
SUB LVL-4	WP5	EQX2	Bottom	-0.003	-0.718	0.109	-0.1709	-12.5885	15.8885
SUB LVL-4	WP5	EQX3	Top	-0.011	0.668	0.142	1.1446	-15.885	85.4085
SUB LVL-4	WP5	EQX3	Bottom	-0.011	0.668	0.142	1.1446	-14.4659	92.0899
SUB LVL-4	WP5	EQY1	Top	-0.033	7.566	-0.356	-0.2977	4.2935	256.4571
SUB LVL-4	WP5	EQY1	Bottom	-0.033	7.566	-0.356	-0.2977	0.7358	332.121
SUB LVL-4	WP5	EQY2	Top	-0.039	8.568	-0.331	0.6778	2.6352	303.4002
SUB LVL-4	WP5	EQY2	Bottom	-0.039	8.568	-0.331	0.6778	-0.6737	389.078
SUB LVL-4	WP5	EQY3	Top	-0.027	6.565	-0.381	-1.2732	5.9518	209.5139
SUB LVL-4	WP5	EQY3	Bottom	-0.027	6.565	-0.381	-1.2732	2.1453	275.164
SUB LVL-4	WP5	Wind-X	Top	-0.001	-0.14	0.426	0.8233	-3.4046	4.9957
SUB LVL-4	WP5	Wind-X	Bottom	-0.001	-0.14	0.426	0.8233	0.8566	3.5908
SUB LVL-4	WP5	Wind-Y	Top	-0.015	4.026	-0.205	0.5162	1.1751	115.4635
SUB LVL-4	WP5	Wind-Y	Bottom	-0.015	4.026	-0.205	0.5162	-0.8732	155.7255
SUB LVL-4	WP6	Dead	Top	-474.489	-0.605	-0.025	-2.1219	0.3936	-718.5322
SUB LVL-4	WP6	Dead	Bottom	-507.77	-0.605	-0.025	-2.1219	0.1464	-724.5863
SUB LVL-4	WP6	Extra Dead	Top	-51.861	1.048	0.101	2.8785	2.2196	90.6882
SUB LVL-4	WP6	Extra Dead	Bottom	-51.861	1.048	0.101	2.8785	3.2257	101.1709
SUB LVL-4	WP6	EQX1	Top	-5.003E-05	14.647	-1.842	2.9034	-29.1441	582.8104
SUB LVL-4	WP6	EQX1	Bottom	-5.003E-05	14.647	-1.944	2.9995	-48.0729	729.2853

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-4	WP6	EQX2	Top	-2.248E-05	5.153	-1.785	1.1465	-30.6985	245.7134
SUB LVL-4	WP6	EQX2	Bottom	-2.248E-05	5.153	-1.887	1.2426	-49.0589	297.2436
SUB LVL-4	WP6	EQX3	Top	-7.757E-05	24.142	-1.898	4.6602	-27.5897	919.9074
SUB LVL-4	WP6	EQX3	Bottom	-7.757E-05	24.142	-2.001	4.7563	-47.0869	1161.327
SUB LVL-4	WP6	EQY1	Top	-0.0002295	84.893	-1.532	-6.0576	2.363	2809.6113
SUB LVL-4	WP6	EQY1	Bottom	-0.0002295	84.975	-1.532	-6.0576	-12.9579	3658.9466
SUB LVL-4	WP6	EQY2	Top	-0.0002711	98.739	-1.615	-3.4338	4.6974	3317.0631
SUB LVL-4	WP6	EQY2	Bottom	-0.0002711	98.821	-1.615	-3.4338	-11.4569	4304.8632
SUB LVL-4	WP6	EQY3	Top	-0.0001878	71.046	-1.449	-8.6814	0.0286	2302.1595
SUB LVL-4	WP6	EQY3	Bottom	-0.0001878	71.128	-1.449	-8.6814	-14.459	3013.0299
SUB LVL-4	WP6	Wind-X	Top	0	1.004	-0.626	0.1239	-2.7524	54.9314
SUB LVL-4	WP6	Wind-X	Bottom	0	1.004	-0.626	0.1239	-9.0082	64.9689
SUB LVL-4	WP6	Wind-Y	Top	-0.0001068	44.482	-0.885	-1.558	3.0402	1289.7873
SUB LVL-4	WP6	Wind-Y	Bottom	-0.0001068	44.482	-0.885	-1.558	-5.811	1734.6114
SUB LVL-4	SW1	Dead	Top	-1170.595	-15.696	-0.055	-5.2019	-1.0428	-421.8494
SUB LVL-4	SW1	Dead	Bottom	-1216.011	-15.696	-0.055	-5.2019	-1.5943	-578.8068
SUB LVL-4	SW1	Extra Dead	Top	-476.339	-0.437	-0.184	0.257	1.1676	-3430.9095
SUB LVL-4	SW1	Extra Dead	Bottom	-476.339	-0.437	-0.184	0.257	-0.6718	-3435.2845
SUB LVL-4	SW1	EQX1	Top	5.943E-05	-29.387	-3.577	7.3471	-46.821	-1484.0769
SUB LVL-4	SW1	EQX1	Bottom	5.943E-05	-29.387	-3.577	7.3471	-82.5941	-1777.949
SUB LVL-4	SW1	EQX2	Top	2.753E-05	-11.256	-3.503	5.3833	-47.3973	-620.4085
SUB LVL-4	SW1	EQX2	Bottom	2.753E-05	-11.256	-3.503	5.3833	-82.4245	-732.9731
SUB LVL-4	SW1	EQX3	Top	9.133E-05	-47.518	-3.652	9.3109	-46.2447	-2347.7454
SUB LVL-4	SW1	EQX3	Bottom	9.133E-05	-47.518	-3.652	9.3109	-82.7637	-2822.9249
SUB LVL-4	SW1	EQY1	Top	-0.000436	216.438	1.666	10.49	-6.6038	11682.0563
SUB LVL-4	SW1	EQY1	Bottom	-0.000436	216.438	1.666	10.49	10.0539	13846.4343
SUB LVL-4	SW1	EQY2	Top	-0.0003876	190.065	1.552	13.4362	-5.734	10381.8141
SUB LVL-4	SW1	EQY2	Bottom	-0.0003876	190.065	1.552	13.4362	9.7882	12282.4612
SUB LVL-4	SW1	EQY3	Top	-0.0004844	242.811	1.779	7.5439	-7.4737	12982.2985
SUB LVL-4	SW1	EQY3	Bottom	-0.0004844	242.811	1.779	7.5439	10.3196	15410.4075
SUB LVL-4	SW1	Wind-X	Top	5.941E-06	-4.138	-0.092	11.6936	-7.6535	-139.6286
SUB LVL-4	SW1	Wind-X	Bottom	5.941E-06	-4.138	-0.092	11.6936	-8.5702	-181.0047
SUB LVL-4	SW1	Wind-Y	Top	-0.0001473	86.842	0.962	8.0062	-3.4133	3964.903
SUB LVL-4	SW1	Wind-Y	Bottom	-0.0001473	86.842	0.962	8.0062	6.2057	4833.3255
SUB LVL-4	SW2	Dead	Top	-1879.767	1.139	-0.287	-0.1095	-0.1005	-1045.0684
SUB LVL-4	SW2	Dead	Bottom	-1920.567	1.139	-0.287	-0.1095	-2.9704	-1032.8756
SUB LVL-4	SW2	Extra Dead	Top	-1072.488	3.955	0.154	5.5965	-0.8135	-4838.2633
SUB LVL-4	SW2	Extra Dead	Bottom	-1072.488	3.955	0.154	5.5965	0.7314	-4798.7098
SUB LVL-4	SW2	EQX1	Top	1.616	-29.288	-5.023	-17.768	-26.8938	-1394.9014
SUB LVL-4	SW2	EQX1	Bottom	1.616	-29.288	-5.023	-17.768	-77.1209	-1687.7798
SUB LVL-4	SW2	EQX2	Top	1.616	-10.269	-5.024	-20.7674	-26.8975	-608.1764
SUB LVL-4	SW2	EQX2	Bottom	1.616	-10.269	-5.024	-20.7674	-77.1409	-710.8681
SUB LVL-4	SW2	EQX3	Top	1.615	-48.307	-5.021	-14.7686	-26.89	-2181.6263
SUB LVL-4	SW2	EQX3	Bottom	1.615	-48.307	-5.021	-14.7686	-77.1009	-2664.6915
SUB LVL-4	SW2	EQY1	Top	-0.007	335.231	-0.579	-18.5769	2.3596	14055.4766

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-4	SW2	EQY1	Bottom	-0.007	335.231	-0.579	-18.5769	-3.434	17407.7835
SUB LVL-4	SW2	EQY2	Top	-0.008	307.228	-0.578	-14.1526	2.3686	12869.5516
SUB LVL-4	SW2	EQY2	Bottom	-0.008	307.228	-0.578	-14.1526	-3.4113	15941.8278
SUB LVL-4	SW2	EQY3	Top	-0.007	363.234	-0.581	-23.0011	2.3506	15241.4017
SUB LVL-4	SW2	EQY3	Bottom	-0.007	363.234	-0.581	-23.0011	-3.4568	18873.7392
SUB LVL-4	SW2	Wind-X	Top	0.232	-1.988	-1.168	-10.0346	-1.6535	-134.8838
SUB LVL-4	SW2	Wind-X	Bottom	0.232	-1.988	-1.168	-10.0346	-13.3371	-154.7602
SUB LVL-4	SW2	Wind-Y	Top	-0.004	132.884	-0.282	-7.5175	1.1924	4923.2973
SUB LVL-4	SW2	Wind-Y	Bottom	-0.004	132.884	-0.282	-7.5175	-1.6228	6252.1338
SUB LVL-4	SW4	Dead	Top	-1793.921	7.065	0.494	0.0591	-0.5562	-2021.3633
SUB LVL-4	SW4	Dead	Bottom	-1837.887	7.065	0.494	0.0591	4.3887	-1948.0448
SUB LVL-4	SW4	Extra Dead	Top	-111.612	-3.354	0.013	3.6646	0.1004	-342.4471
SUB LVL-4	SW4	Extra Dead	Bottom	-111.612	-3.354	0.013	3.6646	0.2285	-375.9848
SUB LVL-4	SW4	EQX1	Top	-1.495	24.759	-3.687	3.1831	-36.1888	1179.1894
SUB LVL-4	SW4	EQX1	Bottom	-1.495	24.759	-3.687	3.1831	-73.0638	1426.7837
SUB LVL-4	SW4	EQX2	Top	-1.493	11.501	-3.631	-0.2183	-36.4141	504.0027
SUB LVL-4	SW4	EQX2	Bottom	-1.493	11.501	-3.631	-0.2183	-72.7201	619.0155
SUB LVL-4	SW4	EQX3	Top	-1.496	38.018	-3.744	6.5845	-35.9635	1854.3761
SUB LVL-4	SW4	EQX3	Bottom	-1.496	38.018	-3.744	6.5845	-73.4075	2234.5518
SUB LVL-4	SW4	EQY1	Top	-0.013	173.043	-0.768	3.4603	2.7068	9522.6269
SUB LVL-4	SW4	EQY1	Bottom	-0.013	173.043	-0.768	3.4603	-4.976	11253.0535
SUB LVL-4	SW4	EQY2	Top	-0.015	192.373	-0.853	8.5076	3.0427	10540.0407
SUB LVL-4	SW4	EQY2	Bottom	-0.015	192.373	-0.853	8.5076	-5.4836	12463.768
SUB LVL-4	SW4	EQY3	Top	-0.011	153.713	-0.684	-1.587	2.3709	8505.2131
SUB LVL-4	SW4	EQY3	Bottom	-0.011	153.713	-0.684	-1.587	-4.4684	10042.339
SUB LVL-4	SW4	Wind-X	Top	-0.214	4.471	-0.432	3.093	-5.1203	111.8856
SUB LVL-4	SW4	Wind-X	Bottom	-0.214	4.471	-0.432	3.093	-9.4437	156.5952
SUB LVL-4	SW4	Wind-Y	Top	-0.007	87.37	-0.444	4.8876	1.614	4097.1555
SUB LVL-4	SW4	Wind-Y	Bottom	-0.007	87.37	-0.444	4.8876	-2.8299	4970.859
SUB LVL-4	LW1	Dead	Top	-855.103	-3.451	-1.82	1.8696	0.326	-73.7843
SUB LVL-4	LW1	Dead	Bottom	-902.98	-3.451	-1.82	1.4198	-17.8785	107.266
SUB LVL-4	LW1	Extra Dead	Top	-15.731	0.291	-1.175	7.8815	-16.2539	7.0585
SUB LVL-4	LW1	Extra Dead	Bottom	-15.731	0.291	-1.175	7.5912	-28.0047	13.8507
SUB LVL-4	LW1	EQX1	Top	489.29	414.53	-1.213	3.8548	-3.2489	11896.7385
SUB LVL-4	LW1	EQX1	Bottom	489.29	414.53	-1.213	3.5552	-15.3747	15921.138
SUB LVL-4	LW1	EQX2	Top	489.462	413.917	-0.906	0.2667	0.0459	11899.3194
SUB LVL-4	LW1	EQX2	Bottom	489.462	413.917	-0.906	0.0428	-9.0147	15917.5502
SUB LVL-4	LW1	EQX3	Top	489.118	415.142	-1.519	7.4429	-6.5437	11894.1575
SUB LVL-4	LW1	EQX3	Bottom	489.118	415.142	-1.519	7.0676	-21.7346	15924.7259
SUB LVL-4	LW1	EQY1	Top	-2.293	-8.14	5.38	-29.2046	72.6671	9.6268
SUB LVL-4	LW1	EQY1	Bottom	-2.293	-8.14	5.38	-27.8754	126.4629	-71.2073
SUB LVL-4	LW1	EQY2	Top	-2.691	-7.204	4.929	-23.8832	67.6855	5.3568
SUB LVL-4	LW1	EQY2	Bottom	-2.691	-7.204	4.929	-22.6653	116.9782	-66.0229
SUB LVL-4	LW1	EQY3	Top	-1.894	-9.076	5.83	-34.5261	77.6487	13.8968
SUB LVL-4	LW1	EQY3	Bottom	-1.894	-9.076	5.83	-33.0856	135.9477	-76.3917

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-4	LW1	Wind-X	Top	68.267	73.359	-0.735	-1.068	2.115	1711.2464
SUB LVL-4	LW1	Wind-X	Bottom	68.267	73.359	-0.735	-1.2496	-5.2335	2427.9733
SUB LVL-4	LW1	Wind-Y	Top	-1.776	-4.637	1.694	-11.6503	25.9804	6.1276
SUB LVL-4	LW1	Wind-Y	Bottom	-1.776	-4.637	1.694	-11.2318	42.9179	-39.8021
SUB LVL-4	LW2	Dead	Top	-864.05	1.988	-1.33	-0.2672	-2.783	86.9646
SUB LVL-4	LW2	Dead	Bottom	-911.927	1.988	-1.33	-0.0452	-16.0815	-40.2977
SUB LVL-4	LW2	Extra Dead	Top	-17.753	2.002	-0.65	4.1039	-12.8926	-1.3981
SUB LVL-4	LW2	Extra Dead	Bottom	-17.753	2.002	-0.65	4.2123	-19.3894	15.6592
SUB LVL-4	LW2	EQX1	Top	-489.291	419.678	0.087	4.5489	-3.206	11853.5286
SUB LVL-4	LW2	EQX1	Bottom	-489.291	419.678	0.087	4.5344	-2.3363	15968.623
SUB LVL-4	LW2	EQX2	Top	-489.462	419.186	0.165	1.9625	-1.7139	11854.349
SUB LVL-4	LW2	EQX2	Bottom	-489.462	419.186	0.165	1.935	-0.0664	15964.4957
SUB LVL-4	LW2	EQX3	Top	-489.119	420.17	0.009	7.1353	-4.6982	11852.7081
SUB LVL-4	LW2	EQX3	Bottom	-489.119	420.17	0.009	7.1337	-4.6061	15972.7504
SUB LVL-4	LW2	EQY1	Top	2.356	-7.591	4.77	-0.5646	65.7288	10.8957
SUB LVL-4	LW2	EQY1	Bottom	2.356	-7.591	4.77	-1.3609	113.431	-64.6217
SUB LVL-4	LW2	EQY2	Top	2.754	-6.861	4.657	3.274	63.4746	9.7382
SUB LVL-4	LW2	EQY2	Bottom	2.754	-6.861	4.657	2.4966	110.0433	-58.4149
SUB LVL-4	LW2	EQY3	Top	1.957	-8.321	4.884	-4.4031	67.983	12.0532
SUB LVL-4	LW2	EQY3	Bottom	1.957	-8.321	4.884	-5.2184	116.8187	-70.8284
SUB LVL-4	LW2	Wind-X	Top	-68.268	73.421	0.239	1.0148	-1.1159	1709.3756
SUB LVL-4	LW2	Wind-X	Bottom	-68.268	73.421	0.239	0.9749	1.273	2432.1848
SUB LVL-4	LW2	Wind-Y	Top	1.8	-3.562	1.842	2.3634	23.8177	6.4812
SUB LVL-4	LW2	Wind-Y	Bottom	1.8	-3.562	1.842	2.0559	42.2371	-28.8371
SUB LVL-4	LW3	Dead	Top	-892.54	0.042	-0.903	1.1358	-6.4286	-142.661
SUB LVL-4	LW3	Dead	Bottom	-940.344	0.042	-0.903	0.9064	-15.4565	89.0193
SUB LVL-4	LW3	Extra Dead	Top	-17.908	1.632	-0.155	5.0887	-9.4683	-9.6933
SUB LVL-4	LW3	Extra Dead	Bottom	-17.908	1.632	-0.155	5.0493	-11.0182	11.1785
SUB LVL-4	LW3	EQX1	Top	482.043	418.513	-0.338	3.1232	1.9722	11826.0661
SUB LVL-4	LW3	EQX1	Bottom	482.043	418.513	-0.338	3.0372	-1.4104	15888.6685
SUB LVL-4	LW3	EQX2	Top	481.794	418.083	-0.367	0.8135	1.4285	11826.1539
SUB LVL-4	LW3	EQX2	Bottom	481.794	418.083	-0.367	0.7201	-2.2445	15884.5219
SUB LVL-4	LW3	EQX3	Top	482.291	418.943	-0.309	5.4328	2.516	11825.9783
SUB LVL-4	LW3	EQX3	Bottom	482.291	418.943	-0.309	5.3543	-0.5762	15892.8151
SUB LVL-4	LW3	EQY1	Top	2.216	-2.68	2.615	-20.0843	63.2146	5.6737
SUB LVL-4	LW3	EQY1	Bottom	2.216	-2.68	2.615	-19.4195	89.3678	-21.6862
SUB LVL-4	LW3	EQY2	Top	2.735	-2.051	2.657	-16.649	64.0361	5.6824
SUB LVL-4	LW3	EQY2	Bottom	2.735	-2.051	2.657	-15.9737	90.6047	-15.5184
SUB LVL-4	LW3	EQY3	Top	1.697	-3.309	2.574	-23.5195	62.393	5.665
SUB LVL-4	LW3	EQY3	Bottom	1.697	-3.309	2.574	-22.8653	88.131	-27.854
SUB LVL-4	LW3	Wind-X	Top	67.212	72.905	-0.203	-0.1671	0.91	1703.8629
SUB LVL-4	LW3	Wind-X	Bottom	67.212	72.905	-0.203	-0.2188	-1.1206	2415.8291
SUB LVL-4	LW3	Wind-Y	Top	1.763	-0.523	0.795	-7.7043	24.653	3.234
SUB LVL-4	LW3	Wind-Y	Bottom	1.763	-0.523	0.795	-7.5023	32.6003	-2.4408
SUB LVL-4	LW4	Dead	Top	-888.049	4.014	-0.512	-0.2077	-9.0688	16.6341

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-4	LW4	Dead	Bottom	-935.926	4.014	-0.512	-0.1222	-14.1912	-94.3668
SUB LVL-4	LW4	Extra Dead	Top	-14.593	0.751	0.006	2.9497	-5.078	-3.4588
SUB LVL-4	LW4	Extra Dead	Bottom	-14.593	0.751	0.006	2.9487	-5.0158	1.6102
SUB LVL-4	LW4	EQX1	Top	-482.142	407.201	1.167	5.3692	1.4086	11863.7514
SUB LVL-4	LW4	EQX1	Bottom	-482.142	407.201	1.167	5.1744	13.0787	15855.2752
SUB LVL-4	LW4	EQX2	Top	-481.894	406.578	0.992	2.2042	-1.1553	11863.3238
SUB LVL-4	LW4	EQX2	Bottom	-481.894	406.578	0.992	2.0386	8.7686	15848.654
SUB LVL-4	LW4	EQX3	Top	-482.39	407.825	1.342	8.5342	3.9725	11864.179
SUB LVL-4	LW4	EQX3	Bottom	-482.39	407.825	1.342	8.3102	17.3889	15861.8964
SUB LVL-4	LW4	EQY1	Top	-2.148	6.165	2.387	6.7764	57.072	-5.7238
SUB LVL-4	LW4	EQY1	Bottom	-2.148	6.165	2.387	6.3779	80.9378	55.5656
SUB LVL-4	LW4	EQY2	Top	-2.666	7.072	2.644	11.4851	60.9373	-4.9696
SUB LVL-4	LW4	EQY2	Bottom	-2.666	7.072	2.644	11.0436	87.3812	65.3036
SUB LVL-4	LW4	EQY3	Top	-1.629	5.258	2.129	2.0677	53.2067	-6.4781
SUB LVL-4	LW4	EQY3	Bottom	-1.629	5.258	2.129	1.7123	74.4943	45.8277
SUB LVL-4	LW4	Wind-X	Top	-67.227	69.041	0.157	1.0792	0.0232	1709.9235
SUB LVL-4	LW4	Wind-X	Bottom	-67.227	69.041	0.157	1.053	1.5966	2389.1119
SUB LVL-4	LW4	Wind-Y	Top	-1.737	4.179	0.974	6.3779	23.2022	-3.8395
SUB LVL-4	LW4	Wind-Y	Bottom	-1.737	4.179	0.974	6.2153	32.9395	37.6628
SUB LVL-4	SW5	Dead	Top	-1166.755	8.85	0.468	-4.751	0.579	-3014.371
SUB LVL-4	SW5	Dead	Bottom	-1223.2	8.85	0.468	-4.751	5.26	-2924.0704
SUB LVL-4	SW5	Extra Dead	Top	-46	1.513	0.073	7.1306	-0.6347	359.5882
SUB LVL-4	SW5	Extra Dead	Bottom	-46	1.513	0.073	7.1306	0.0956	374.723
SUB LVL-4	SW5	EQX1	Top	7.136E-05	30.912	-4.536	4.3575	-75.0782	2208.3614
SUB LVL-4	SW5	EQX1	Bottom	7.136E-05	30.912	-4.61	5.2023	-120.8384	2517.4822
SUB LVL-4	SW5	EQX2	Top	3.181E-05	6.687	-4.457	0.7088	-75.0508	941.4687
SUB LVL-4	SW5	EQX2	Bottom	3.181E-05	6.687	-4.531	1.5536	-120.0164	1008.3358
SUB LVL-4	SW5	EQX3	Top	0.0001109	55.137	-4.616	8.0061	-75.1057	3475.2542
SUB LVL-4	SW5	EQX3	Bottom	0.0001109	55.137	-4.689	8.8509	-121.6605	4026.6286
SUB LVL-4	SW5	EQY1	Top	0.0003295	214.722	-1.397	-25.0502	5.4662	10578.6483
SUB LVL-4	SW5	EQY1	Bottom	0.0003295	214.781	-1.397	-25.0502	-8.505	12726.1902
SUB LVL-4	SW5	EQY2	Top	0.0003893	250.123	-1.514	-19.582	5.4182	12486.5241
SUB LVL-4	SW5	EQY2	Bottom	0.0003893	250.183	-1.514	-19.582	-9.7233	14988.0777
SUB LVL-4	SW5	EQY3	Top	0.0002697	179.321	-1.28	-30.5184	5.5143	8670.7726
SUB LVL-4	SW5	EQY3	Bottom	0.0002697	179.38	-1.28	-30.5184	-7.2867	10464.3026
SUB LVL-4	SW5	Wind-X	Top	6.867E-06	1.244	0.113	-13.2117	-12.7568	208.8651
SUB LVL-4	SW5	Wind-X	Bottom	6.867E-06	1.244	0.113	-13.2117	-11.6289	221.3059
SUB LVL-4	SW5	Wind-Y	Top	0.0001535	110.577	-0.747	-10.5974	2.7175	4901.2834
SUB LVL-4	SW5	Wind-Y	Bottom	0.0001535	110.577	-0.747	-10.5974	-4.7529	6007.0582
SUB LVL-4	SW3	Dead	Top	-1538.045	0.526	-0.044	0.2132	0.1496	-456.3735
SUB LVL-4	SW3	Dead	Bottom	-1576.178	0.526	-0.044	0.2132	-0.2944	-438.9374
SUB LVL-4	SW3	Extra Dead	Top	-61.769	-2.073	-0.023	3.0362	0.1667	-1322.6417
SUB LVL-4	SW3	Extra Dead	Bottom	-61.769	-2.073	-0.023	3.0362	-0.0681	-1343.3738
SUB LVL-4	SW3	EQX1	Top	-0.01	1.357	-4.266	-12.0241	-30.5926	-84.7428
SUB LVL-4	SW3	EQX1	Bottom	-0.01	1.357	-4.266	-12.0241	-73.2536	-71.1703

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-4	SW3	EQX2	Top	-0.012	0.743	-4.27	-14.0665	-30.5938	-39.2863
SUB LVL-4	SW3	EQX2	Bottom	-0.012	0.743	-4.27	-14.0665	-73.2982	-31.8519
SUB LVL-4	SW3	EQX3	Top	-0.009	1.971	-4.262	-9.9818	-30.5913	-130.1992
SUB LVL-4	SW3	EQX3	Bottom	-0.009	1.971	-4.262	-9.9818	-73.209	-110.4887
SUB LVL-4	SW3	EQY1	Top	-0.112	139.54	0.076	-5.684	-0.3084	8108.1814
SUB LVL-4	SW3	EQY1	Bottom	-0.112	139.54	0.076	-5.684	0.4553	9503.5861
SUB LVL-4	SW3	EQY2	Top	-0.11	140.445	0.083	-2.669	-0.306	8039.4918
SUB LVL-4	SW3	EQY2	Bottom	-0.11	140.445	0.083	-2.669	0.5214	9443.9371
SUB LVL-4	SW3	EQY3	Top	-0.114	138.636	0.07	-8.6989	-0.3109	8176.8709
SUB LVL-4	SW3	EQY3	Bottom	-0.114	138.636	0.07	-8.6989	0.3893	9563.2351
SUB LVL-4	SW3	Wind-X	Top	-0.001	0.54	-0.858	-4.0296	-3.1806	-6.114
SUB LVL-4	SW3	Wind-X	Bottom	-0.001	0.54	-0.858	-4.0296	-11.7643	-0.7184
SUB LVL-4	SW3	Wind-Y	Top	-0.039	64.687	0.009	-1.5271	-0.0434	3081.1188
SUB LVL-4	SW3	Wind-Y	Bottom	-0.039	64.687	0.009	-1.5271	0.05	3727.9854
SUB LVL-5	WP1	Dead	Top	-412.83	10.585	0.05	-0.0777	-0.5028	-51.0705
SUB LVL-5	WP1	Dead	Bottom	-421.705	10.585	0.05	-0.0777	0	55.4046
SUB LVL-5	WP1	Extra Dead	Top	-7.788	0.918	-0.076	-0.0427	0.7609	-96.367
SUB LVL-5	WP1	Extra Dead	Bottom	-7.788	0.918	-0.076	-0.0427	0	-87.1908
SUB LVL-5	WP1	EQX1	Top	-0.006	-0.684	0.661	0.571	-6.6064	-53.4932
SUB LVL-5	WP1	EQX1	Bottom	-0.006	-0.684	0.661	0.571	0	-60.3301
SUB LVL-5	WP1	EQX2	Top	-0.003	0.396	0.705	0.4591	-7.0517	-23.456
SUB LVL-5	WP1	EQX2	Bottom	-0.003	0.396	0.705	0.4591	0	-19.4942
SUB LVL-5	WP1	EQX3	Top	-0.009	-1.764	0.616	0.6829	-6.1611	-83.5305
SUB LVL-5	WP1	EQX3	Bottom	-0.009	-1.764	0.616	0.6829	0	-101.166
SUB LVL-5	WP1	EQY1	Top	0.044	10.973	0.009	1.5381	-0.0943	403.7824
SUB LVL-5	WP1	EQY1	Bottom	0.044	10.973	0.009	1.5381	0	513.512
SUB LVL-5	WP1	EQY2	Top	0.039	9.391	-0.057	1.702	0.5721	358.8826
SUB LVL-5	WP1	EQY2	Bottom	0.039	9.391	-0.057	1.702	0	452.7964
SUB LVL-5	WP1	EQY3	Top	0.048	12.555	0.076	1.3742	-0.7607	448.6822
SUB LVL-5	WP1	EQY3	Bottom	0.048	12.555	0.076	1.3742	0	574.2277
SUB LVL-5	WP1	Wind-X	Top	-0.001	-0.046	0.043	0.439	-0.4343	-5.1538
SUB LVL-5	WP1	Wind-X	Bottom	-0.001	-0.046	0.043	0.439	0	-5.6119
SUB LVL-5	WP1	Wind-Y	Top	0.015	4.429	-0.045	1.0094	0.4483	142.0739
SUB LVL-5	WP1	Wind-Y	Bottom	0.015	4.429	-0.045	1.0094	0	186.3641
SUB LVL-5	WP3	Dead	Top	-740.905	-9.871	0.015	-0.0981	-0.1545	-189.0085
SUB LVL-5	WP3	Dead	Bottom	-771.536	-9.871	0.015	-0.1	0	-381.1129
SUB LVL-5	WP3	Extra Dead	Top	-970.612	-17.35	0.134	1.0133	-1.3403	-2057.4731
SUB LVL-5	WP3	Extra Dead	Bottom	-970.612	-17.35	0.134	0.9969	0	-2349.9345
SUB LVL-5	WP3	EQX1	Top	2.064E-05	-16.829	1.459	1.5807	-14.5354	-1144.1217
SUB LVL-5	WP3	EQX1	Bottom	2.064E-05	-16.829	1.444	1.4449	0	-1312.4161
SUB LVL-5	WP3	EQX2	Top	9.534E-06	-4.704	1.397	0.9021	-13.9216	-456.7855
SUB LVL-5	WP3	EQX2	Bottom	9.534E-06	-4.704	1.383	0.774	0	-503.8283
SUB LVL-5	WP3	EQX3	Top	3.175E-05	-28.955	1.52	2.2592	-15.1493	-1831.4579
SUB LVL-5	WP3	EQX3	Bottom	3.175E-05	-28.955	1.506	2.1159	0	-2121.0038
SUB LVL-5	WP3	EQY1	Top	-0.0001517	139.685	-0.033	-1.1886	0.3335	9062.0563



Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-5	WP3	EQY1	Bottom	-0.0001517	139.696	-0.033	-1.1845	0	10458.9461
SUB LVL-5	WP3	EQY2	Top	-0.0001349	122.031	0.059	-0.1802	-0.5897	8033.739
SUB LVL-5	WP3	EQY2	Bottom	-0.0001349	122.042	0.059	-0.1875	0	9254.085
SUB LVL-5	WP3	EQY3	Top	-0.0001686	157.339	-0.126	-2.197	1.2567	10090.3736
SUB LVL-5	WP3	EQY3	Bottom	-0.0001686	157.351	-0.126	-2.1816	0	11663.8072
SUB LVL-5	WP3	Wind-X	Top	0	-1.352	0.191	0.2251	-1.9088	-107.6555
SUB LVL-5	WP3	Wind-X	Bottom	0	-1.352	0.191	0.2017	0	-121.1747
SUB LVL-5	WP3	Wind-Y	Top	-5.144E-05	57.643	0.057	0.0399	-0.5651	3177.2451
SUB LVL-5	WP3	Wind-Y	Bottom	-5.144E-05	57.643	0.057	0.033	0	3753.6792
SUB LVL-5	WP4	Dead	Top	-196.903	-6.661	-0.016	0.2042	0.1582	15.1178
SUB LVL-5	WP4	Dead	Bottom	-206.084	-6.661	-0.016	0.2042	0	-51.8037
SUB LVL-5	WP4	Extra Dead	Top	-189.665	-9.286	0.07	0.5292	-0.6989	-63.2074
SUB LVL-5	WP4	Extra Dead	Bottom	-189.665	-9.286	0.07	0.5292	0	-156.0702
SUB LVL-5	WP4	EQX1	Top	0.014	-1.823	0.469	0.3848	-4.6921	-53.4934
SUB LVL-5	WP4	EQX1	Bottom	0.014	-1.823	0.469	0.3848	0	-71.7221
SUB LVL-5	WP4	EQX2	Top	0.006	-0.572	0.433	0.105	-4.3329	-21.3452
SUB LVL-5	WP4	EQX2	Bottom	0.006	-0.572	0.433	0.105	0	-27.0618
SUB LVL-5	WP4	EQX3	Top	0.021	-3.074	0.505	0.6647	-5.0514	-85.6417
SUB LVL-5	WP4	EQX3	Bottom	0.021	-3.074	0.505	0.6647	0	-116.3825
SUB LVL-5	WP4	EQY1	Top	-0.102	14.923	-0.102	0.0016	1.017	419.1593
SUB LVL-5	WP4	EQY1	Bottom	-0.102	14.923	-0.102	0.0016	0	568.3906
SUB LVL-5	WP4	EQY2	Top	-0.09	13.09	-0.048	0.4139	0.4776	371.156
SUB LVL-5	WP4	EQY2	Bottom	-0.09	13.09	-0.048	0.4139	0	502.0538
SUB LVL-5	WP4	EQY3	Top	-0.113	16.756	-0.156	-0.4106	1.5564	467.1627
SUB LVL-5	WP4	EQY3	Bottom	-0.113	16.756	-0.156	-0.4106	0	634.7273
SUB LVL-5	WP4	Wind-X	Top	0.001	-0.187	0.062	-0.2659	-0.6184	-4.4466
SUB LVL-5	WP4	Wind-X	Bottom	0.001	-0.187	0.062	-0.2659	0	-6.3142
SUB LVL-5	WP4	Wind-Y	Top	-0.034	5.902	-0.017	0.2943	0.1657	149.1278
SUB LVL-5	WP4	Wind-Y	Bottom	-0.034	5.902	-0.017	0.2943	0	208.1435
SUB LVL-5	WP5	Dead	Top	-457.976	-10.858	-0.139	0.0298	1.3945	-24.9341
SUB LVL-5	WP5	Dead	Bottom	-470.819	-10.858	-0.139	0.0298	0	-134.1686
SUB LVL-5	WP5	Extra Dead	Top	-8.168	0.367	0.146	0.3568	-1.4647	7.2786
SUB LVL-5	WP5	Extra Dead	Bottom	-8.168	0.367	0.146	0.3568	0	10.9504
SUB LVL-5	WP5	EQX1	Top	-0.007	5.859	1.353	1.5644	-13.5272	53.9877
SUB LVL-5	WP5	EQX1	Bottom	-0.007	5.859	1.353	1.5644	0	112.5728
SUB LVL-5	WP5	EQX2	Top	-0.003	3.09	1.259	1.2366	-12.5885	15.888
SUB LVL-5	WP5	EQX2	Bottom	-0.003	3.09	1.259	1.2366	0	46.7863
SUB LVL-5	WP5	EQX3	Top	-0.012	8.627	1.447	1.8922	-14.4659	92.0875
SUB LVL-5	WP5	EQX3	Bottom	-0.012	8.627	1.447	1.8922	0	178.3593
SUB LVL-5	WP5	EQY1	Top	-0.034	22.515	-0.074	-0.782	0.7358	332.1131
SUB LVL-5	WP5	EQY1	Bottom	-0.034	22.515	-0.074	-0.782	0	557.2665
SUB LVL-5	WP5	EQY2	Top	-0.041	26.583	0.067	-0.299	-0.6737	389.0688
SUB LVL-5	WP5	EQY2	Bottom	-0.041	26.583	0.067	-0.299	0	654.9002
SUB LVL-5	WP5	EQY3	Top	-0.028	18.448	-0.215	-1.2649	2.1453	275.1574
SUB LVL-5	WP5	EQY3	Bottom	-0.028	18.448	-0.215	-1.2649	0	459.6328

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-5	WP5	Wind-X	Top	-0.001	0.908	-0.086	-0.437	0.8566	3.5907
SUB LVL-5	WP5	Wind-X	Bottom	-0.001	0.908	-0.086	-0.437	0	12.6697
SUB LVL-5	WP5	Wind-Y	Top	-0.016	12.523	0.087	-0.3528	-0.8733	155.7217
SUB LVL-5	WP5	Wind-Y	Bottom	-0.016	12.523	0.087	-0.3528	0	280.9524
SUB LVL-5	WP6	Dead	Top	-536.351	4.316	-0.015	0.3681	0.1464	-765.4949
SUB LVL-5	WP6	Dead	Bottom	-569.632	4.316	-0.015	0.3681	0	-722.3318
SUB LVL-5	WP6	Extra Dead	Top	-55.025	1.918	-0.323	0.6536	3.2257	98.2311
SUB LVL-5	WP6	Extra Dead	Bottom	-55.025	1.918	-0.323	0.6536	0	117.4076
SUB LVL-5	WP6	EQX1	Top	-4.973E-05	15.169	4.82	0.2377	-48.0729	729.2852
SUB LVL-5	WP6	EQX1	Bottom	-4.973E-05	15.169	4.788	0.2728	0	880.9715
SUB LVL-5	WP6	EQX2	Top	-2.239E-05	-0.105	4.919	-0.3994	-49.0589	297.2436
SUB LVL-5	WP6	EQX2	Bottom	-2.239E-05	-0.105	4.886	-0.3643	0	296.196
SUB LVL-5	WP6	EQX3	Top	-7.707E-05	30.442	4.722	0.8748	-47.0869	1161.3268
SUB LVL-5	WP6	EQX3	Bottom	-7.707E-05	30.442	4.689	0.9099	0	1465.7471
SUB LVL-5	WP6	EQY1	Top	-0.0002277	132.344	1.296	-1.7736	-12.9579	3658.946
SUB LVL-5	WP6	EQY1	Bottom	-0.0002277	132.37	1.296	-1.7736	0	4982.4876
SUB LVL-5	WP6	EQY2	Top	-0.0002691	154.702	1.146	-0.8327	-11.4569	4304.8626
SUB LVL-5	WP6	EQY2	Bottom	-0.0002691	154.728	1.146	-0.8327	0	5851.9835
SUB LVL-5	WP6	EQY3	Top	-0.0001863	109.986	1.446	-2.7146	-14.459	3013.0294
SUB LVL-5	WP6	EQY3	Bottom	-0.0001863	110.012	1.446	-2.7146	0	4112.9917
SUB LVL-5	WP6	Wind-X	Top	0	1.254	0.901	-0.3407	-9.0082	64.9688
SUB LVL-5	WP6	Wind-X	Bottom	0	1.254	0.901	-0.3407	0	77.504
SUB LVL-5	WP6	Wind-Y	Top	-0.000106	70.501	0.581	-0.57	-5.811	1734.6111
SUB LVL-5	WP6	Wind-Y	Bottom	-0.000106	70.501	0.581	-0.57	0	2439.624
SUB LVL-5	SW1	Dead	Top	-1272.495	18.372	0.159	-0.8253	-1.5943	-198.8165
SUB LVL-5	SW1	Dead	Bottom	-1317.912	18.372	0.159	-0.8253	0	-15.0984
SUB LVL-5	SW1	Extra Dead	Top	-476.339	17.777	0.067	2.9883	-0.6718	-3435.2844
SUB LVL-5	SW1	Extra Dead	Bottom	-476.339	17.777	0.067	2.9883	0	-3257.5097
SUB LVL-5	SW1	EQX1	Top	5.913E-05	-19.124	8.259	0.0345	-82.5941	-1777.949
SUB LVL-5	SW1	EQX1	Bottom	5.913E-05	-19.124	8.259	0.0345	0	-1969.1852
SUB LVL-5	SW1	EQX2	Top	2.742E-05	0.146	8.242	-1.4317	-82.4245	-732.9731
SUB LVL-5	SW1	EQX2	Bottom	2.742E-05	0.146	8.242	-1.4317	0	-731.518
SUB LVL-5	SW1	EQX3	Top	9.083E-05	-38.393	8.276	1.5007	-82.7637	-2822.9248
SUB LVL-5	SW1	EQX3	Bottom	9.083E-05	-38.393	8.276	1.5007	0	-3206.8525
SUB LVL-5	SW1	EQY1	Top	-0.0004335	214.654	-1.005	-24.1709	10.0539	13846.4343
SUB LVL-5	SW1	EQY1	Bottom	-0.0004335	214.654	-1.005	-24.1709	0	15992.9725
SUB LVL-5	SW1	EQY2	Top	-0.0003854	186.592	-0.979	-21.9953	9.7882	12282.4611
SUB LVL-5	SW1	EQY2	Bottom	-0.0003854	186.592	-0.979	-21.9953	0	14148.3804
SUB LVL-5	SW1	EQY3	Top	-0.0004817	242.716	-1.032	-26.3464	10.3196	15410.4075
SUB LVL-5	SW1	EQY3	Bottom	-0.0004817	242.716	-1.032	-26.3464	0	17837.5646
SUB LVL-5	SW1	Wind-X	Top	5.911E-06	-0.44	0.857	-5.619	-8.5702	-181.0047
SUB LVL-5	SW1	Wind-X	Bottom	5.911E-06	-0.44	0.857	-5.619	0	-185.4083
SUB LVL-5	SW1	Wind-Y	Top	-0.0001464	90.178	-0.621	-12.3174	6.2057	4833.3255
SUB LVL-5	SW1	Wind-Y	Bottom	-0.0001464	90.178	-0.621	-12.3174	0	5735.1063
SUB LVL-5	SW2	Dead	Top	-2001.805	-19.647	0.296	1.1184	-2.9647	-91.0073

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-5	SW2	Dead	Bottom	-2061.805	-19.647	0.296	1.1184	0	-287.4755
SUB LVL-5	SW2	Extra Dead	Top	-1072.479	-20.497	-0.074	-1.8205	0.7361	-4798.7098
SUB LVL-5	SW2	Extra Dead	Bottom	-1072.479	-20.497	-0.074	-1.8205	0	-5003.6764
SUB LVL-5	SW2	EQX1	Top	1.655	-27.292	7.71	24.7894	-77.1006	-1687.7798
SUB LVL-5	SW2	EQX1	Bottom	1.655	-27.292	7.71	24.7894	0	-1960.6993
SUB LVL-5	SW2	EQX2	Top	1.655	-2.319	7.712	23.8209	-77.1205	-710.8681
SUB LVL-5	SW2	EQX2	Bottom	1.655	-2.319	7.712	23.8209	0	-734.0587
SUB LVL-5	SW2	EQX3	Top	1.655	-52.265	7.708	25.7578	-77.0806	-2664.6915
SUB LVL-5	SW2	EQX3	Bottom	1.655	-52.265	7.708	25.7578	0	-3187.3399
SUB LVL-5	SW2	EQY1	Top	-0.008	450.368	0.343	20.6759	-3.4345	17407.7837
SUB LVL-5	SW2	EQY1	Bottom	-0.008	450.368	0.343	20.6759	0	21911.4623
SUB LVL-5	SW2	EQY2	Top	-0.009	413.594	0.341	22.088	-3.4117	15941.8279
SUB LVL-5	SW2	EQY2	Bottom	-0.009	413.594	0.341	22.088	0	20077.7709
SUB LVL-5	SW2	EQY3	Top	-0.008	487.141	0.346	19.2638	-3.4572	18873.7394
SUB LVL-5	SW2	EQY3	Bottom	-0.008	487.141	0.346	19.2638	0	23745.1536
SUB LVL-5	SW2	Wind-X	Top	0.239	-2.272	1.333	7.4603	-13.3339	-154.7602
SUB LVL-5	SW2	Wind-X	Bottom	0.239	-2.272	1.333	7.4603	0	-177.4838
SUB LVL-5	SW2	Wind-Y	Top	-0.005	189.295	0.162	13.1001	-1.6229	6252.1338
SUB LVL-5	SW2	Wind-Y	Bottom	-0.005	189.295	0.162	13.1001	0	8145.0812
SUB LVL-5	SW4	Dead	Top	-1963.559	-2.945	-0.433	0.2991	4.3285	-1813.0409
SUB LVL-5	SW4	Dead	Bottom	-2007.525	-2.945	-0.433	0.2991	0	-1839.823
SUB LVL-5	SW4	Extra Dead	Top	-115.844	-5.128	-0.023	-0.1512	0.228	-338.8969
SUB LVL-5	SW4	Extra Dead	Bottom	-115.844	-5.128	-0.023	-0.1512	0	-390.178
SUB LVL-5	SW4	EQX1	Top	-1.524	11.087	7.305	3.8315	-73.0485	1426.7837
SUB LVL-5	SW4	EQX1	Bottom	-1.524	11.087	7.305	3.8315	0	1537.6585
SUB LVL-5	SW4	EQX2	Top	-1.523	-4.648	7.27	3.8172	-72.7048	619.0155
SUB LVL-5	SW4	EQX2	Bottom	-1.523	-4.648	7.27	3.8172	0	572.5405
SUB LVL-5	SW4	EQX3	Top	-1.526	26.822	7.339	3.8458	-73.3922	2234.5518
SUB LVL-5	SW4	EQX3	Bottom	-1.526	26.822	7.339	3.8458	0	2502.7765
SUB LVL-5	SW4	EQY1	Top	-0.013	226.983	0.498	-4.8931	-4.9759	11253.0533
SUB LVL-5	SW4	EQY1	Bottom	-0.013	226.983	0.498	-4.8931	0	13522.8855
SUB LVL-5	SW4	EQY2	Top	-0.015	250.028	0.548	-4.8871	-5.4835	12463.7678
SUB LVL-5	SW4	EQY2	Bottom	-0.015	250.028	0.548	-4.8871	0	14964.051
SUB LVL-5	SW4	EQY3	Top	-0.011	203.938	0.447	-4.8991	-4.4683	10042.3387
SUB LVL-5	SW4	EQY3	Bottom	-0.011	203.938	0.447	-4.8991	0	12081.7199
SUB LVL-5	SW4	Wind-X	Top	-0.218	-1.784	0.944	-1.2298	-9.4413	156.5952
SUB LVL-5	SW4	Wind-X	Bottom	-0.218	-1.784	0.944	-1.2298	0	138.7561
SUB LVL-5	SW4	Wind-Y	Top	-0.007	116.908	0.283	-3.2006	-2.8299	4970.8589
SUB LVL-5	SW4	Wind-Y	Bottom	-0.007	116.908	0.283	-3.2006	0	6139.9353
SUB LVL-5	LW1	Dead	Top	-930.385	-15.951	1.788	-1.8117	-17.8787	-103.2648
SUB LVL-5	LW1	Dead	Bottom	-978.262	-15.951	1.788	-1.3699	0	-28.613
SUB LVL-5	LW1	Extra Dead	Top	-15.74	-3.47	2.8	-4.4123	-28.0047	9.804
SUB LVL-5	LW1	Extra Dead	Bottom	-15.74	-3.47	2.8	-3.7204	0	-21.0067
SUB LVL-5	LW1	EQX1	Top	489.252	459.818	1.537	-0.4713	-15.3746	16041.3435
SUB LVL-5	LW1	EQX1	Bottom	489.252	459.818	1.537	-0.0914	0	20518.6404

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-5	LW1	EQX2	Top	489.424	460.459	0.901	0.4355	-9.0147	16037.7987
SUB LVL-5	LW1	EQX2	Bottom	489.424	460.459	0.901	0.6583	0	20521.463
SUB LVL-5	LW1	EQX3	Top	489.08	459.177	2.173	-1.3782	-21.7346	16044.8882
SUB LVL-5	LW1	EQX3	Bottom	489.08	459.177	2.173	-0.8411	0	20515.8178
SUB LVL-5	LW1	EQY1	Top	-2.292	7.619	-12.646	22.6513	126.4626	-71.76
SUB LVL-5	LW1	EQY1	Bottom	-2.292	7.619	-12.646	19.5266	0	5.0006
SUB LVL-5	LW1	EQY2	Top	-2.691	6.668	-11.698	21.2974	116.9779	-66.6751
SUB LVL-5	LW1	EQY2	Bottom	-2.691	6.668	-11.698	18.4071	0	0.6746
SUB LVL-5	LW1	EQY3	Top	-1.893	8.57	-13.595	24.0051	135.9473	-76.845
SUB LVL-5	LW1	EQY3	Bottom	-1.893	8.57	-13.595	20.6461	0	9.3266
SUB LVL-5	LW1	Wind-X	Top	68.261	84.123	0.523	0.7406	-5.2335	2444.7325
SUB LVL-5	LW1	Wind-X	Bottom	68.261	84.123	0.523	0.8699	0	3269.095
SUB LVL-5	LW1	Wind-Y	Top	-1.776	4.129	-4.292	10.6134	42.9178	-40.2353
SUB LVL-5	LW1	Wind-Y	Bottom	-1.776	4.129	-4.292	9.553	0	1.498
SUB LVL-5	LW2	Dead	Top	-939.338	-2.946	1.608	-0.4666	-16.0817	99.0748
SUB LVL-5	LW2	Dead	Bottom	-987.215	-2.946	1.608	-0.735	0	-90.0911
SUB LVL-5	LW2	Extra Dead	Top	-17.754	-2.277	1.939	-1.1092	-19.3894	18.6377
SUB LVL-5	LW2	Extra Dead	Bottom	-17.754	-2.277	1.939	-1.4329	0	-7.0948
SUB LVL-5	LW2	EQX1	Top	-489.253	450.771	0.234	-0.4887	-2.3363	16049.6158
SUB LVL-5	LW2	EQX1	Bottom	-489.253	450.771	0.234	-0.5277	0	20475.6426
SUB LVL-5	LW2	EQX2	Top	-489.424	451.295	0.007	-0.4159	-0.0664	16045.517
SUB LVL-5	LW2	EQX2	Bottom	-489.424	451.295	0.007	-0.417	0	20476.7636
SUB LVL-5	LW2	EQX3	Top	-489.081	450.246	0.461	-0.5614	-4.6062	16053.7146
SUB LVL-5	LW2	EQX3	Bottom	-489.081	450.246	0.461	-0.6383	0	20474.5216
SUB LVL-5	LW2	EQY1	Top	2.357	7.995	-11.343	-2.3851	113.4309	-65.0314
SUB LVL-5	LW2	EQY1	Bottom	2.357	7.995	-11.343	-0.4915	0	15.311
SUB LVL-5	LW2	EQY2	Top	2.755	7.22	-11.004	-2.4989	110.0432	-58.891
SUB LVL-5	LW2	EQY2	Bottom	2.755	7.22	-11.004	-0.6618	0	13.7706
SUB LVL-5	LW2	EQY3	Top	1.958	8.77	-11.682	-2.2713	116.8187	-71.1718
SUB LVL-5	LW2	EQY3	Bottom	1.958	8.77	-11.682	-0.3211	0	16.8514
SUB LVL-5	LW2	Wind-X	Top	-68.262	80.794	-0.127	-0.4132	1.273	2443.4739
SUB LVL-5	LW2	Wind-X	Bottom	-68.262	80.794	-0.127	-0.392	0	3240.0166
SUB LVL-5	LW2	Wind-Y	Top	1.8	3.388	-4.224	-1.6236	42.2371	-29.1431
SUB LVL-5	LW2	Wind-Y	Bottom	1.8	3.388	-4.224	-0.9185	0	5.0329
SUB LVL-5	LW3	Dead	Top	-967.43	1.531	1.546	-1.8334	-15.4567	-142.3217
SUB LVL-5	LW3	Dead	Bottom	-1015.235	1.531	1.546	-1.4406	0	123.2825
SUB LVL-5	LW3	Extra Dead	Top	-17.909	-0.285	1.102	-1.9699	-11.0182	6.6111
SUB LVL-5	LW3	Extra Dead	Bottom	-17.909	-0.285	1.102	-1.6898	0	8.3104
SUB LVL-5	LW3	EQX1	Top	482.006	451.57	0.141	0.3566	-1.4104	16010.4825
SUB LVL-5	LW3	EQX1	Bottom	482.006	451.57	0.141	0.3924	0	20403.6618
SUB LVL-5	LW3	EQX2	Top	481.758	451.95	0.224	0.2011	-2.2445	16006.273
SUB LVL-5	LW3	EQX2	Bottom	481.758	451.95	0.224	0.2582	0	20403.3171
SUB LVL-5	LW3	EQX3	Top	482.255	451.189	0.058	0.512	-0.5762	16014.692
SUB LVL-5	LW3	EQX3	Bottom	482.255	451.189	0.058	0.5267	0	20404.0066
SUB LVL-5	LW3	EQY1	Top	2.217	2.644	-8.937	13.0106	89.3677	-21.1049

Table 4.1 - Pier Forces (continued)

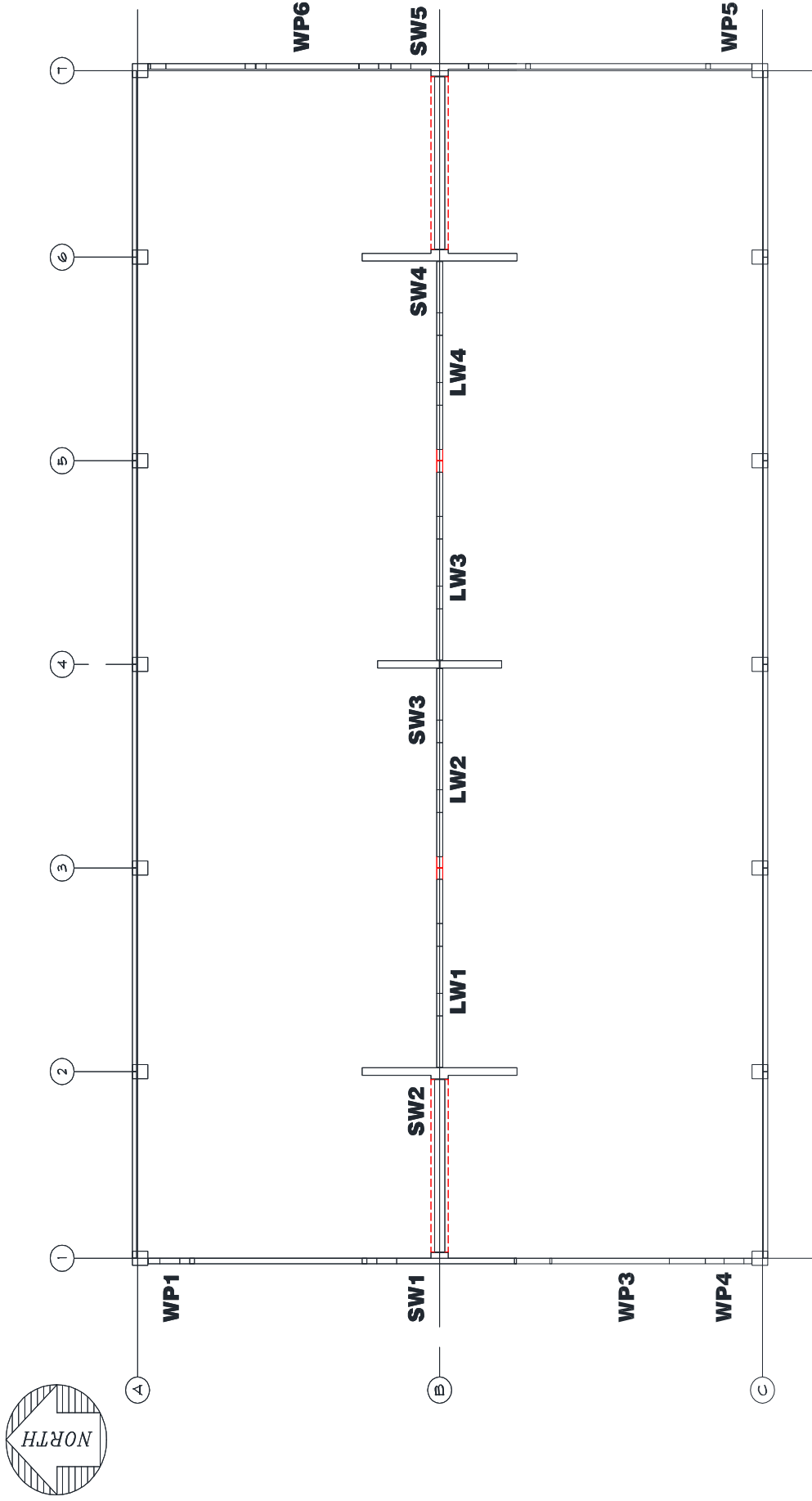
Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-5	LW3	EQY1	Bottom	2.217	2.644	-8.937	10.739	0	4.7725
SUB LVL-5	LW3	EQY2	Top	2.736	2.077	-9.06	13.2292	90.6046	-14.8056
SUB LVL-5	LW3	EQY2	Bottom	2.736	2.077	-9.06	10.9262	0	5.2641
SUB LVL-5	LW3	EQY3	Top	1.698	3.212	-8.813	12.792	88.1309	-27.4042
SUB LVL-5	LW3	EQY3	Bottom	1.698	3.212	-8.813	10.5519	0	4.281
SUB LVL-5	LW3	Wind-X	Top	67.207	80.678	0.112	0.2247	-1.1206	2432.8021
SUB LVL-5	LW3	Wind-X	Bottom	67.207	80.678	0.112	0.2532	0	3222.4963
SUB LVL-5	LW3	Wind-Y	Top	1.763	0.382	-3.26	6.215	32.6003	-1.9865
SUB LVL-5	LW3	Wind-Y	Bottom	1.763	0.382	-3.26	5.3864	0	1.3902
SUB LVL-5	LW4	Dead	Top	-963.563	18.09	1.419	-0.6128	-14.1912	45.2355
SUB LVL-5	LW4	Dead	Bottom	-1011.44	18.09	1.419	-0.8498	0	62.3878
SUB LVL-5	LW4	Extra Dead	Top	-14.594	1.357	0.502	-0.1035	-5.0158	4.0631
SUB LVL-5	LW4	Extra Dead	Bottom	-14.594	1.357	0.502	-0.1872	0	15.1973
SUB LVL-5	LW4	EQX1	Top	-482.115	472.541	-1.308	-1.3757	13.0787	15935.221
SUB LVL-5	LW4	EQX1	Bottom	-482.115	472.541	-1.308	-1.1574	0	20580.145
SUB LVL-5	LW4	EQX2	Top	-481.866	473.136	-0.877	-0.8588	8.7686	15928.5587
SUB LVL-5	LW4	EQX2	Bottom	-481.866	473.136	-0.877	-0.7124	0	20579.4719
SUB LVL-5	LW4	EQX3	Top	-482.363	471.946	-1.739	-1.8927	17.3889	15941.8833
SUB LVL-5	LW4	EQX3	Bottom	-482.363	471.946	-1.739	-1.6024	0	20580.8182
SUB LVL-5	LW4	EQY1	Top	-2.147	-7.555	-8.094	-9.5121	80.9377	55.9212
SUB LVL-5	LW4	EQY1	Bottom	-2.147	-7.555	-8.094	-8.1609	0	-19.9896
SUB LVL-5	LW4	EQY2	Top	-2.666	-8.451	-8.738	-10.2918	87.3812	65.7453
SUB LVL-5	LW4	EQY2	Bottom	-2.666	-8.451	-8.738	-8.833	0	-19.2082
SUB LVL-5	LW4	EQY3	Top	-1.629	-6.66	-7.449	-8.7323	74.4943	46.0971
SUB LVL-5	LW4	EQY3	Bottom	-1.629	-6.66	-7.449	-7.4887	0	-20.771
SUB LVL-5	LW4	Wind-X	Top	-67.223	87.433	-0.16	-0.4728	1.5966	2400.2501
SUB LVL-5	LW4	Wind-X	Bottom	-67.223	87.433	-0.16	-0.4461	0	3263.3556
SUB LVL-5	LW4	Wind-Y	Top	-1.737	-4.431	-3.294	-5.8449	32.9395	37.9512
SUB LVL-5	LW4	Wind-Y	Bottom	-1.737	-4.431	-3.294	-5.295	0	-6.6514
SUB LVL-5	SW5	Dead	Top	-1320.014	-1.201	-0.526	-3.7279	5.26	-3313.0212
SUB LVL-5	SW5	Dead	Bottom	-1375.035	-1.201	-0.526	-3.7279	0	-3337.6031
SUB LVL-5	SW5	Extra Dead	Top	-48.308	1.506	-0.01	1.7606	0.0956	388.6694
SUB LVL-5	SW5	Extra Dead	Bottom	-48.308	1.506	-0.01	1.7606	0	403.7317
SUB LVL-5	SW5	EQX1	Top	7.434E-05	35.536	12.094	1.6448	-120.8384	2517.4821
SUB LVL-5	SW5	EQX1	Bottom	7.434E-05	35.536	12.069	1.9363	0	2872.8438
SUB LVL-5	SW5	EQX2	Top	3.29E-05	10.014	12.012	-0.2714	-120.0164	1008.3358
SUB LVL-5	SW5	EQX2	Bottom	3.29E-05	10.014	11.986	0.0201	0	1108.4713
SUB LVL-5	SW5	EQX3	Top	0.0001158	61.059	12.176	3.5611	-121.6605	4026.6285
SUB LVL-5	SW5	EQX3	Bottom	0.0001158	61.059	12.151	3.8526	0	4637.2162
SUB LVL-5	SW5	EQY1	Top	0.0003457	222.876	0.85	-1.611	-8.505	12726.1899
SUB LVL-5	SW5	EQY1	Bottom	0.0003457	222.896	0.85	-1.611	0	14955.0322
SUB LVL-5	SW5	EQY2	Top	0.0004083	260.242	0.972	1.2138	-9.7233	14988.0774
SUB LVL-5	SW5	EQY2	Bottom	0.0004083	260.262	0.972	1.2138	0	17590.5793
SUB LVL-5	SW5	EQY3	Top	0.000283	185.51	0.729	-4.4359	-7.2867	10464.3024
SUB LVL-5	SW5	EQY3	Bottom	0.000283	185.53	0.729	-4.4359	0	12319.4852

Table 4.1 - Pier Forces (continued)

Story	Pier	Load Case/Combo	Location	P kip	V2 kip	V3 kip	T kip-ft	M2 kip-ft	M3 kip-ft
SUB LVL-5	SW5	Wind-X	Top	7.13E-06	4.5	1.163	9.2311	-11.6289	221.3059
SUB LVL-5	SW5	Wind-X	Bottom	7.13E-06	4.5	1.163	9.2311	0	266.3036
SUB LVL-5	SW5	Wind-Y	Top	0.0001613	118.645	0.475	1.337	-4.7529	6007.0581
SUB LVL-5	SW5	Wind-Y	Bottom	0.0001613	118.645	0.475	1.337	0	7193.5082
SUB LVL-5	SW3	Dead	Top	-1643.986	-19.845	0.036	0.3277	-0.3644	322.8818
SUB LVL-5	SW3	Dead	Bottom	-1682.119	-19.845	0.036	0.3277	0	136.6088
SUB LVL-5	SW3	Extra Dead	Top	-61.768	-5.657	0.007	-0.0427	-0.0681	-1343.3738
SUB LVL-5	SW3	Extra Dead	Bottom	-61.768	-5.657	0.007	-0.0427	0	-1399.9403
SUB LVL-5	SW3	EQX1	Top	-0.01	4.153	7.321	15.929	-73.2132	-71.1703
SUB LVL-5	SW3	EQX1	Bottom	-0.01	4.153	7.321	15.929	0	-29.6374
SUB LVL-5	SW3	EQX2	Top	-0.012	2.385	7.326	14.9798	-73.2578	-31.8519
SUB LVL-5	SW3	EQX2	Bottom	-0.012	2.385	7.326	14.9798	0	-8.0067
SUB LVL-5	SW3	EQX3	Top	-0.009	5.922	7.317	16.8781	-73.1686	-110.4886
SUB LVL-5	SW3	EQX3	Bottom	-0.009	5.922	7.317	16.8781	0	-51.2682
SUB LVL-5	SW3	EQY1	Top	-0.114	191.689	-0.046	4.7701	0.4553	9503.5862
SUB LVL-5	SW3	EQY1	Bottom	-0.114	191.689	-0.046	4.7701	0	11420.4764
SUB LVL-5	SW3	EQY2	Top	-0.112	194.294	-0.052	6.1647	0.5214	9443.9372
SUB LVL-5	SW3	EQY2	Bottom	-0.112	194.294	-0.052	6.1647	0	11386.8766
SUB LVL-5	SW3	EQY3	Top	-0.116	189.084	-0.039	3.3755	0.3892	9563.2352
SUB LVL-5	SW3	EQY3	Bottom	-0.116	189.084	-0.039	3.3755	0	11454.0762
SUB LVL-5	SW3	Wind-X	Top	-0.001	0.148	1.176	3.1748	-11.758	-0.7184
SUB LVL-5	SW3	Wind-X	Bottom	-0.001	0.148	1.176	3.1748	0	0.7649
SUB LVL-5	SW3	Wind-Y	Top	-0.04	96.292	-0.005	3.6634	0.05	3727.9855
SUB LVL-5	SW3	Wind-Y	Bottom	-0.04	96.292	-0.005	3.6634	0	4690.9046

**LAYOUT OF LATERAL FORCE RESISTING SYSTEM FOR ETABS**

LA1.105A



**LATERAL FORCES IN THE N-S DIRECTION AT TOP OF EXISTING STRUCTURE**

LA1.106

WALL	Lateral	Load Cases	M in ft-kips	V in kips
WP1	SEISMIC	EQY1	53.10	3.1
		EQY2	47.94	2.8
		EQY3	58.26	3.5
	WIND	WIND Y	16.10	0.9

WALL	Lateral	Load Cases	M in ft-kips	V in kips
SW1	SEISMIC	EQY1	2344.36	112.6
		EQY2	2105.51	100.9
		EQY3	2583.21	124.3
	WIND	WIND Y	710.52	34.9

WALL	Lateral	Load Cases	M in ft-kips	V in kips
WP3	SEISMIC	EQY1	1549.92	70.9
		EQY2	1392.24	63.5
		EQY3	1707.60	78.2
	WIND	WIND Y	468.18	21.8

WALL	Lateral	Load Cases	M in ft-kips	V in kips
SW2	SEISMIC	EQY1	3231.38	150.2
		EQY2	2982.08	137.4
		EQY3	3480.68	163.0
	WIND	WIND Y	1074.19	48.6

WALL	Lateral	Load Cases	M in ft-kips	V in kips
WP4	SEISMIC	EQY1	61.60	2.7
		EQY2	55.45	2.4
		EQY3	67.74	3.0
	WIND	WIND Y	18.31	0.8

WALL	Lateral	Load Cases	M in ft-kips	V in kips
SW3	SEISMIC	EQY1	1636.13	84.4
		EQY2	1638.96	83.1
		EQY3	1633.31	85.6
	WIND	WIND Y	626.19	27.9

WALL	Lateral	Load Cases	M in ft-kips	V in kips
WP5	SEISMIC	EQY1	35.56	2.9
		EQY2	43.70	3.4
		EQY3	27.43	2.3
	WIND	WIND Y	18.30	1.2

WALL	Lateral	Load Cases	M in ft-kips	V in kips
SW4	SEISMIC	EQY1	2081.89	94.7
		EQY2	2336.05	104.4
		EQY3	1827.74	84.9
	WIND	WIND Y	936.72	35.7

WALL	Lateral	Load Cases	M in ft-kips	V in kips
WP6	SEISMIC	EQY1	360.98	27.1
		EQY2	441.57	32.7
		EQY3	280.38	21.5
	WIND	WIND Y	176.11	12.1

WALL	Lateral	Load Cases	M in ft-kips	V in kips
SW5	SEISMIC	EQY1	1518.70	89.9
		EQY2	1825.43	107.5
		EQY3	1211.98	72.2
	WIND	WIND Y	711.43	40.5

**Note:**

Total Seismic Base shear in the N-S direction = 657.9 kips

(Ref Sheet 'LA1.37)

Load Case EQY1, EQY2 & EQY3 correspond to zero, +5 % & -5 % eccentricities respectively.

Load Case WINDX correspond to 0 degrees direction of wind.



**LATERAL FORCES IN THE E-W DIRECTION AT TOP OF EXISTING STRUCTURE**

LA1.10Z

WALL	Lateral	Load Cases	M in ft-kips	V in kips
LW1	SEISMIC	EQX1	-4822.07	195.9
		EQX2	-4814.63	195.5
		EQX3	-4829.51	196.3
	WIND	WIND X	-742.63	24.4

WALL	Lateral	Load Cases	M in ft-kips	V in kips
LW2	SEISMIC	EQX1	-4859.00	200.6
		EQX2	-4858.52	200.7
		EQX3	-4859.48	200.5
	WIND	WIND X	-746.32	25.1

WALL	Lateral	Load Cases	M in ft-kips	V in kips
LW3	SEISMIC	EQX1	-4882.01	200.5
		EQX2	-4883.23	200.6
		EQX3	-4880.78	200.3
	WIND	WIND X	-749.27	25.1

WALL	Lateral	Load Cases	M in ft-kips	V in kips
LW4	SEISMIC	EQX1	-4922.82	201.1
		EQX2	-4926.20	201.3
		EQX3	-4919.43	200.9
	WIND	WIND X	-754.53	25.2

**Note:**

Total Seismic Base shear in the E-W direction = 822.3 kips (Ref Sheet 'LA1.28)

Load Case EQX1, EQX2 & EQX3 correspond to zero, +5 % & -5 % eccentricities respectively.

Load Case WINDX correspond to 0 degrees direction of wind.



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**LOAD COMBINATION CALCULATION (SEISMIC LOAD EFFECT), PER ASCE 7-10**

Per Section 1605.2, IBC 2015

LOAD COMBINATION = 0.9D + 1.0E - Eq. 16.7, IBC 2015

CONSIDERING THE SEISMIC LOAD EFFECT AND COMBINATIONS PER SECTION 12.4.2 OF ASCE 7-10

WHEN THE EFFECT OF GRAVITY AND SEISMIC LOADS COUNTERACT,

E = E<sub>h</sub> - E<sub>v</sub> - Eq.12.4-2, ASCE 7-10

Therefore, E is represented as

E = ρQ<sub>E</sub> - 0.2S<sub>DS</sub>D - Eq.12.4-3, Eq. 12.4-4 of ASCE 7-10

FOR, SEISMIC DESIGN CATEGORY B, ρ = 1.0 - SECTION 12.3.4.2, ASCE 7-10

S<sub>ds</sub> = 0.258 (Refer Design Criteria sheet "DC11")

Hence,

E = 1.0E - 0.052 D

USING THE ABOVE RESULT IN Eq. 16.7,

= 0.9D + (1.0E - 0.052D)

= 0.85D + 1.0E

~ 0.85D + 1.0E

HENCE, THE ABOVE LOAD COMBINATION WILL BE USED FOR THE RESISTING MOMENT CALCULATIONS.



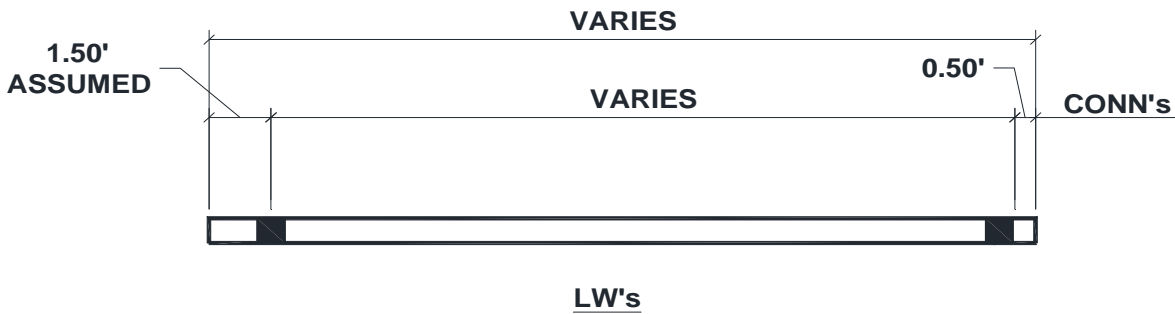
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**OT Analysis for the Walls in 'X'-direction**

**Assumptions**

- \*  $P_{DL}$  is the sum of the Panel Self Weight and the DT stem loads (Linear load multiplied by panel width) from the Foundation Load calculation.
- \* PDL conservatively acts at the center of the Panel.
- \* The Tension support is 1.50' from the end.
- \* The compression support is 0.50' from the end.
- \* For all Panels, the Lever arm distance to calculate the  $T_u$  will be Width of Panel - (1.50 + 0.5').

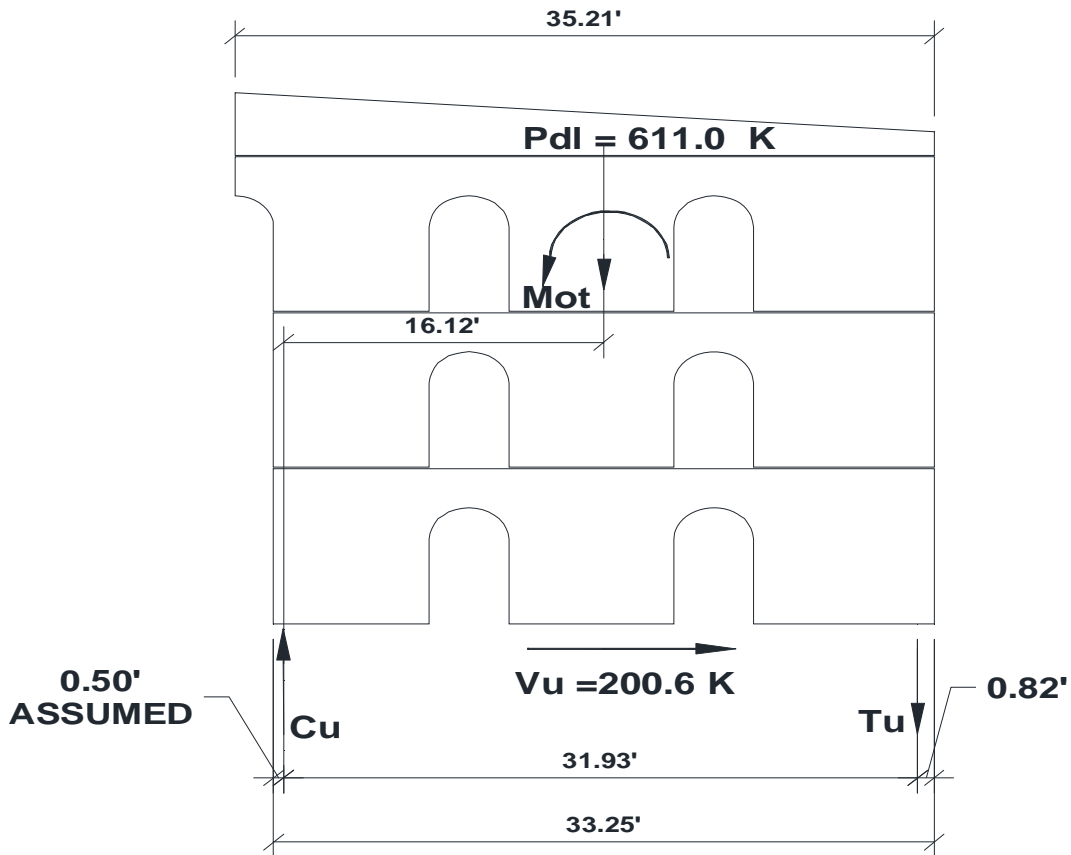




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**Overturning Analysis for the Litewall "LW2"**  
**(Covers LW1, LW3 and LW4)**



$M_{OT} = \underline{4859.00 \text{ 'K}}$  &  $V_u = \underline{200.6 \text{ K}}$  (Refer Sheet 'LA1.07')

$M_R = (611.0 \text{ K} \times 16.21') = \underline{9904.31 \text{ 'K}}$

w /Load Combination : 0.85DL + 1.0 E

$T_u = \frac{4859.0022 \text{ 'K} - (0.85 \times 9904.31 \text{ 'K})}{31.93'} = \underline{-111.5 \text{ K}}$  **NO UPLIFT !**

Pdl Calculation: (Refer Foundation Load Sheet 'FL37 ')

Self Wt. of the Wall + = 438.6 K + 172.4 K = 611.0 K  
 Self Weight of DT



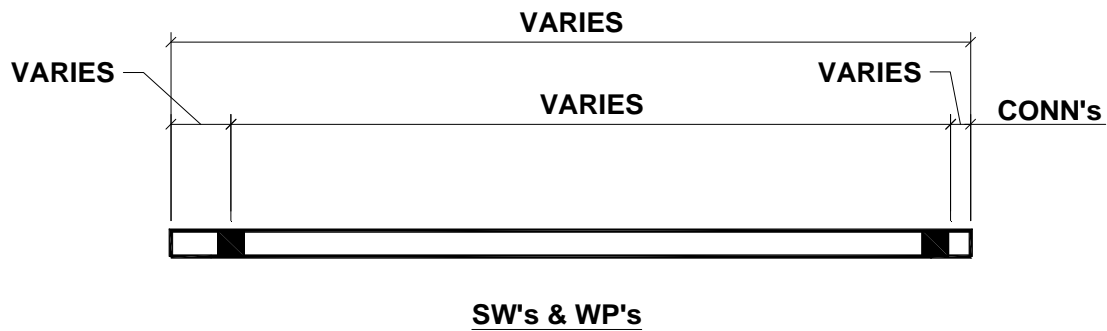
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**OT Analysis for the Walls in 'Y'-direction**

**Assumptions**

- \*  $P_{DL}$  is the sum of the Shearwall Self Weight (Linear load multiplied by panel width) + Point Load from the Inverted tee beam from the Foundation Load calculation.
- \*  $P_{DL}$  conservatively acts at the center of the Shearwall.
- \* The compression support is 0.50' from the end.



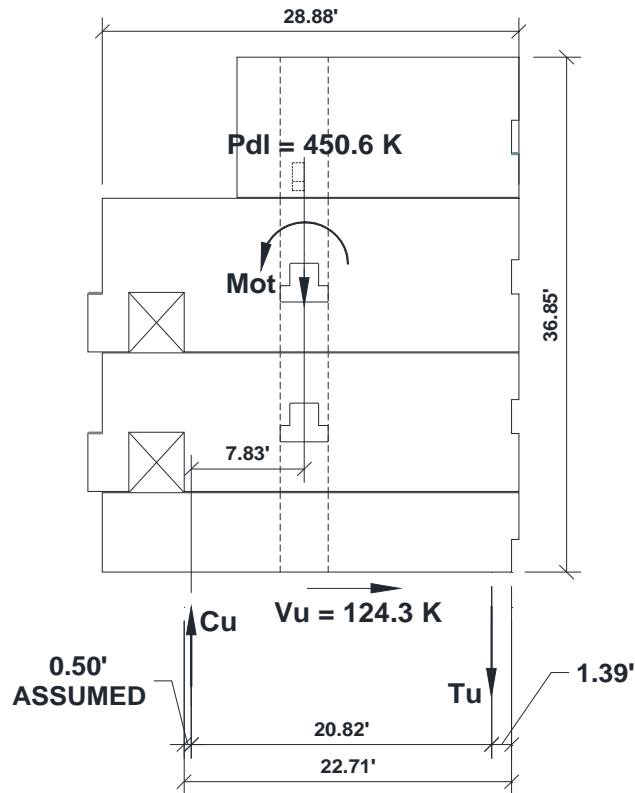


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**Overtuning Analysis for the Shearwall "SW1"**



$M_{OT} = \underline{2583.21 \text{ 'K}}$  &  $V_u = \underline{124.3 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (450.6 \text{ K} \times 7.83') = \underline{3528.20 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{2583.2083 \text{ 'K} - (0.85 \times 3528.2 \text{ 'K})}{20.82'} = \underline{-20.0 \text{ K}}$

**NO UPLIFT !**

Calculation of Pdl:

Self Weight of SW	=	128.3 kips	} (Refer Sheet "FL23" & "FL24")
Self Weight of DT	=	248.7 kips	
Self Weight of ITB	=	35.0 kips	
Self Weight of Closure Spandrel	=	20.2 kips	
Self Weight of Pilaster	=	18.4 kips	
<b>Total PDL</b>	=	<b>450.6 kips</b>	



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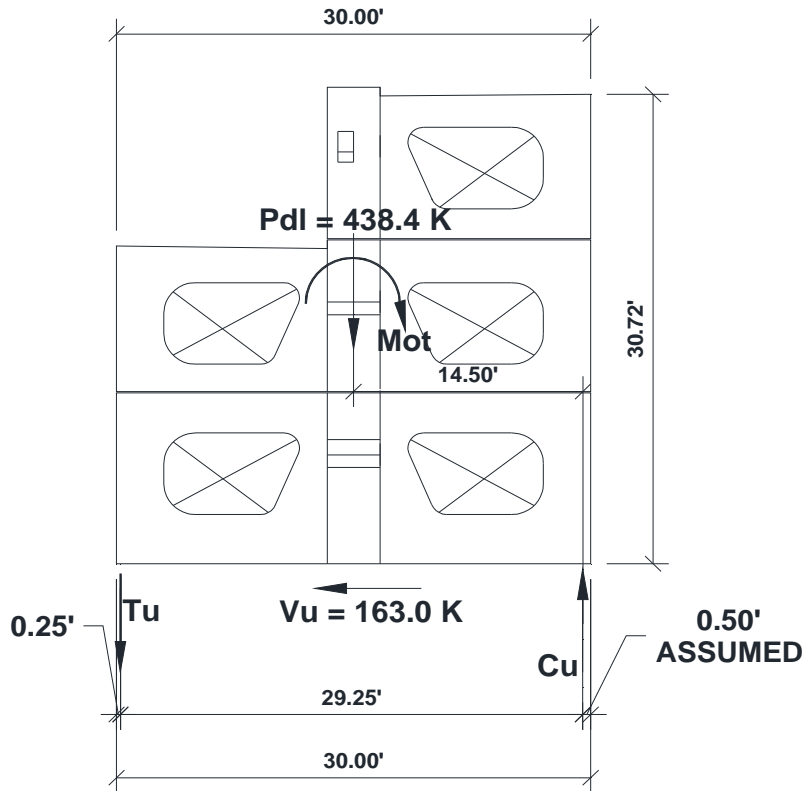
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**Overturing Analysis for the Shearwall "SW2"**



$M_{OT} = \underline{3480.68 \text{ 'K}}$  &  $V_u = \underline{163.0 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (438.4 \text{ K} \times 14.50') = \underline{6356.80 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{3480.6768 \text{ 'K} - (0.85 \times 6356.8 \text{ 'K})}{29.25'} = \underline{-65.7 \text{ K}}$

**NO UPLIFT!**

Calculation of Pdl:

Self Weight of SW	=	117.5 kips	} (Refer Sheet "FL26" & "FL27")
Self Weight of DT	=	248.7 kips	
Self Weight of ITB	=	35.0 kips	
Self Weight of Closure Spandrel	=	20.2 kips	
Self Weight of Pilaster	=	17.0 kips	
<b>Total PDL</b>	=	<b>438.4 kips</b>	



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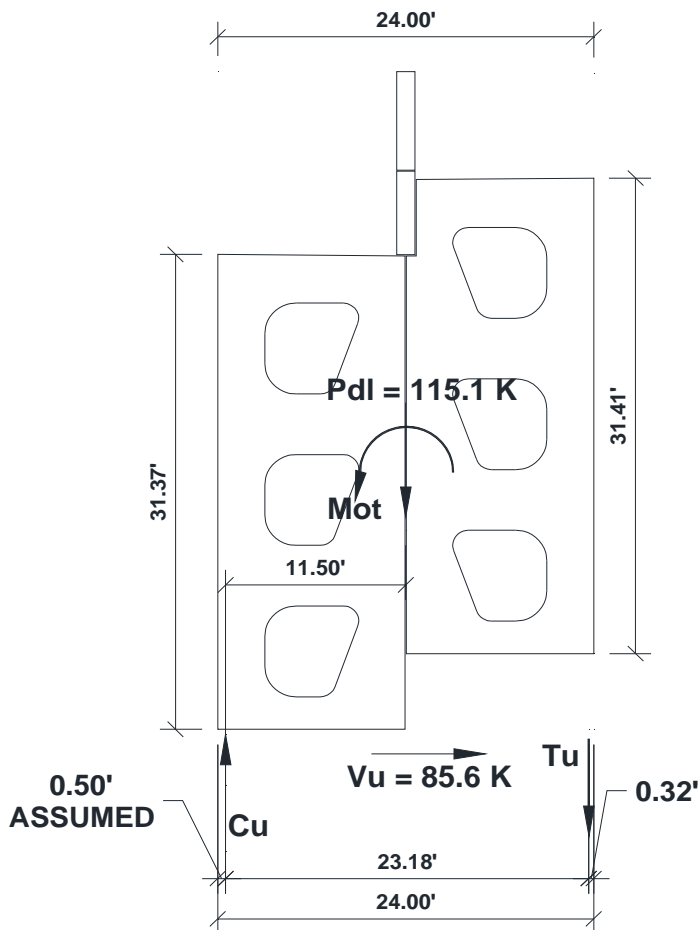
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**Overtuning Analysis for the Shearwall "SW3"**



$M_{OT} = \underline{1633.31 \text{ 'K}}$  &  $V_u = \underline{85.6 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (115.1 \text{ K} \times 11.50') = \underline{1323.65 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{1633.3059 \text{ 'K} - (0.85 \times 1323.65 \text{ 'K})}{23.18'} = \underline{21.9 \text{ K}}$

**PROVIDE As**

Calculation of Pdl:

Self Weight of SW = 115.1 Kips (Refer Sheet "FL26")

Total PDL = 115.1 kips





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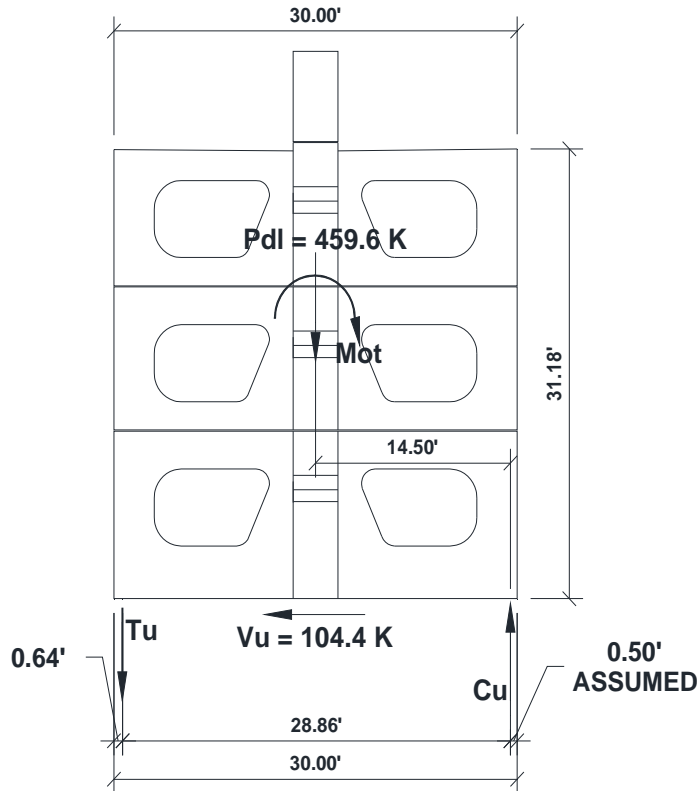
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**Overturing Analysis for the Shearwall "SW4"**



$M_{OT} = \underline{2336.05 \text{ 'K}}$  &  $V_u = \underline{104.4 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (459.6 \text{ K} \times 14.50') = \underline{6664.20 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{2336.0495 \text{ 'K} - (0.85 \times 6664.2 \text{ 'K})}{28.86'} = \underline{-115.3 \text{ K}}$

**NO UPLIFT!**

Calculation of Pdl:

Self Weight of SW	=	141.6 kips	} (Refer Sheet "FL30" & "FL31")
Self Weight of DT	=	248.7 kips	
Self Weight of ITB	=	52.5 kips	
Self Weight of Stub Column	=	6.4 kips	
Self Weight of Pilaster	=	10.4 kips	
<b>Total PDL</b>	=	<b>459.6 kips</b>	

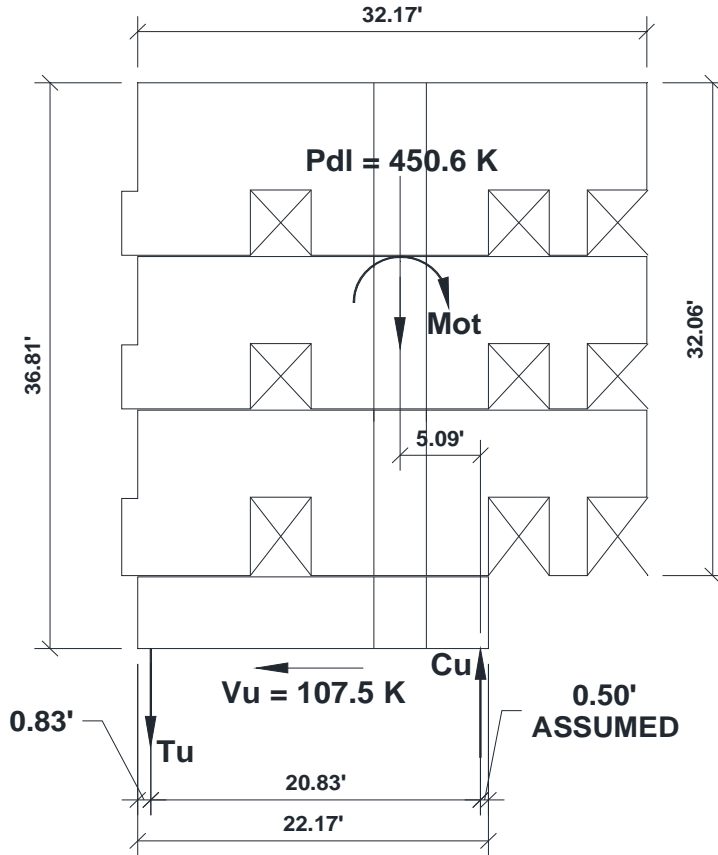


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**Overturing Analysis for the Shearwall "SW5"**



$M_{OT} = 1825.43 \text{ 'K}$  &  $V_u = 107.5 \text{ K}$  (Refer Sheet 'LA1.06')

$M_R = (450.6 \text{ K} \times 5.09') = 2293.55 \text{ 'K}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{1825.4288 \text{ 'K} - (0.85 \times 2293.55 \text{ 'K})}{20.83'} = -6.0 \text{ K}$

**NO UPLIFT!**

Calculation of Pdl:

Self Weight of SW	=	126.2 kips	} (Refer Sheet "FL32" & "FL33")
Self Weight of DT	=	248.7 kips	
Self Weight of ITB	=	52.5 kips	
Self Weight of Pilaster	=	23.2 kips	
<b>Total PDL</b>	=	<b>450.6 kips</b>	

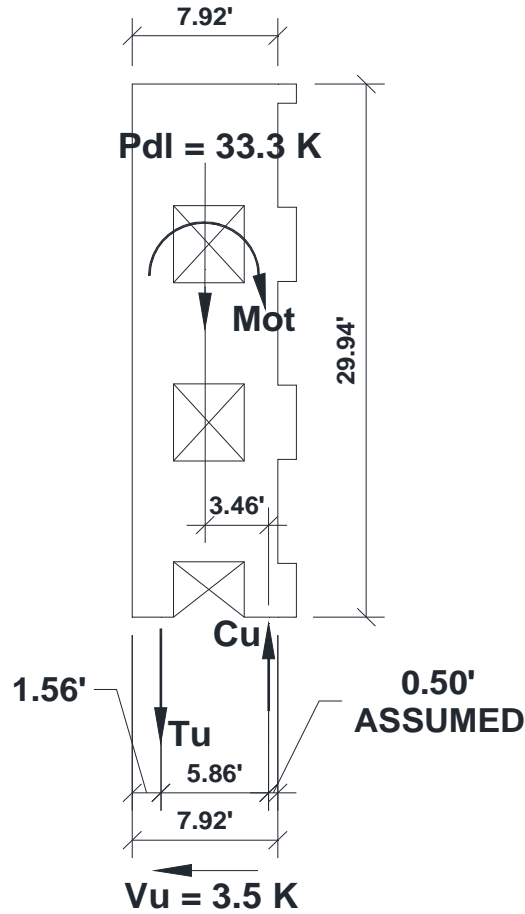


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 SCS DATE 02/12/18  
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**Overturing Analysis for the Wallpanel "WP1"**



$M_{OT} = \underline{58.26 \text{ 'K}}$  &  $V_u = \underline{3.5 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (33.3 \text{ K} \times 3.46') = \underline{115.22 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{58.2589 \text{ 'K} - (0.85 \times 115.22 \text{ 'K})}{5.86'} = \underline{-6.8 \text{ K}}$

**NO UPLIFT!**

Calculation of Pdl:

Self Weight of WP = 33.3 kips (Refer Sheet "FL41")

Total PDL = 33.3 kips

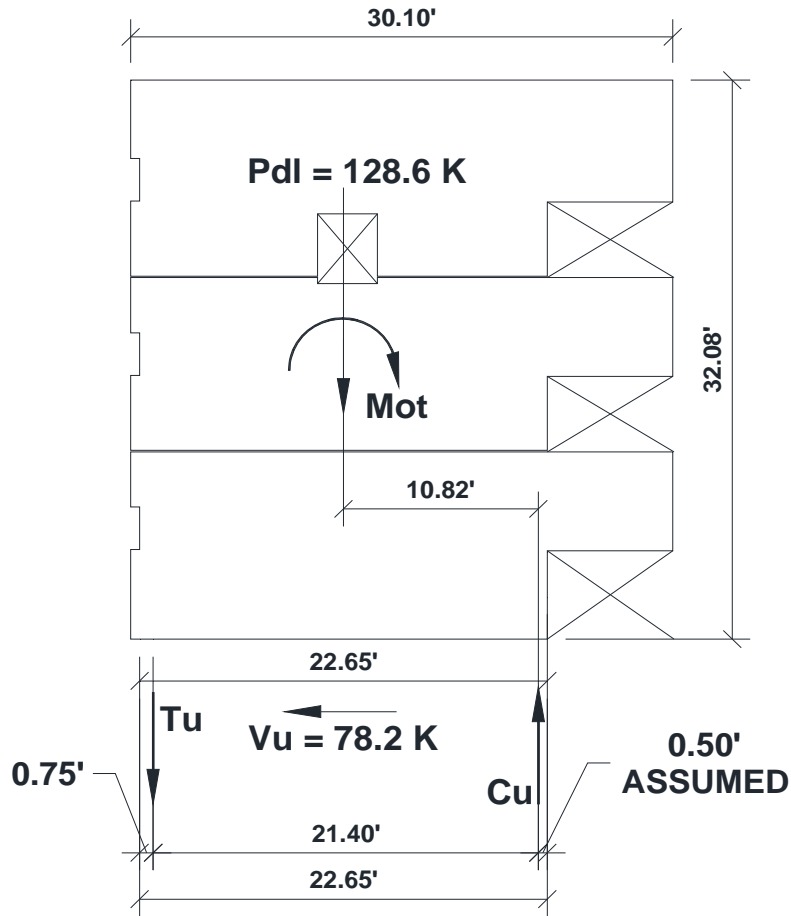


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**Overturing Analysis for the Wallpanel "WP3"**



$M_{OT} = \underline{1707.60 \text{ 'K}}$  &  $V_u = \underline{78.2 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (128.6 \text{ K} \times 10.82') = \underline{1391.45 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{1707.5951 \text{ 'K} - (0.85 \times 1391.45 \text{ 'K})}{21.40'} = \underline{24.5 \text{ K}}$

**PROVIDE As**

Calculation of Pdl:

Self Weight of WP = 128.6 kips (Refer Sheet "FL44")

Total PDL = 128.6 kips



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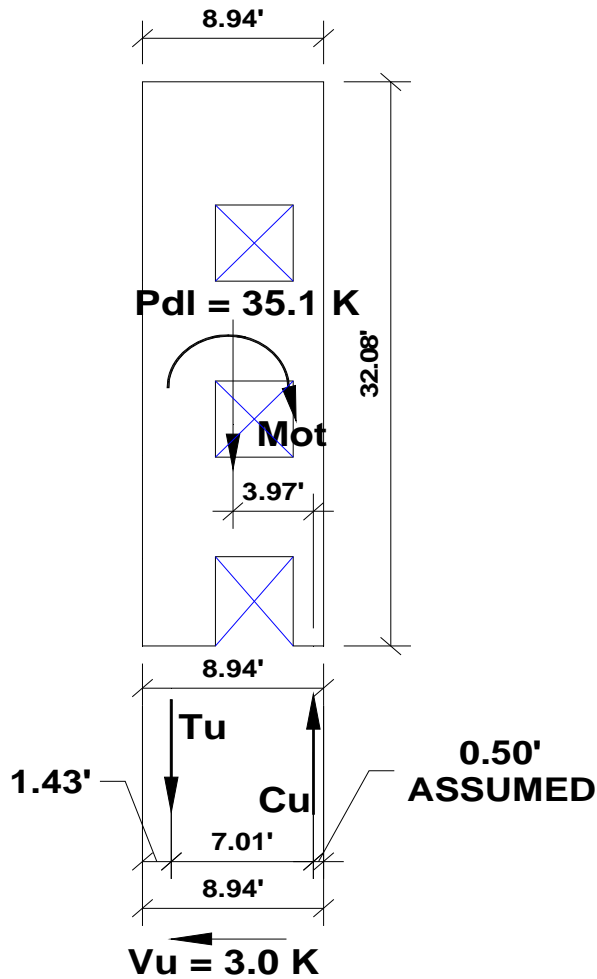
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**Overturing Analysis for the Wallpanel "WP4"**



$M_{OT} = \underline{67.74 \text{ 'K}}$  &  $V_u = \underline{3.0 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (35.1 \text{ K} \times 3.97') = \underline{139.35 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{67.741 \text{ 'K} - (0.85 \times 139.35 \text{ 'K})}{7.01'} = \underline{-7.2 \text{ K}}$

**NO UPLIFT !**

Calculation of Pdl:

Self Weight of WP = 35.1 kips (Refer Sheet "FL46")

Total PDL = 35.1 kips

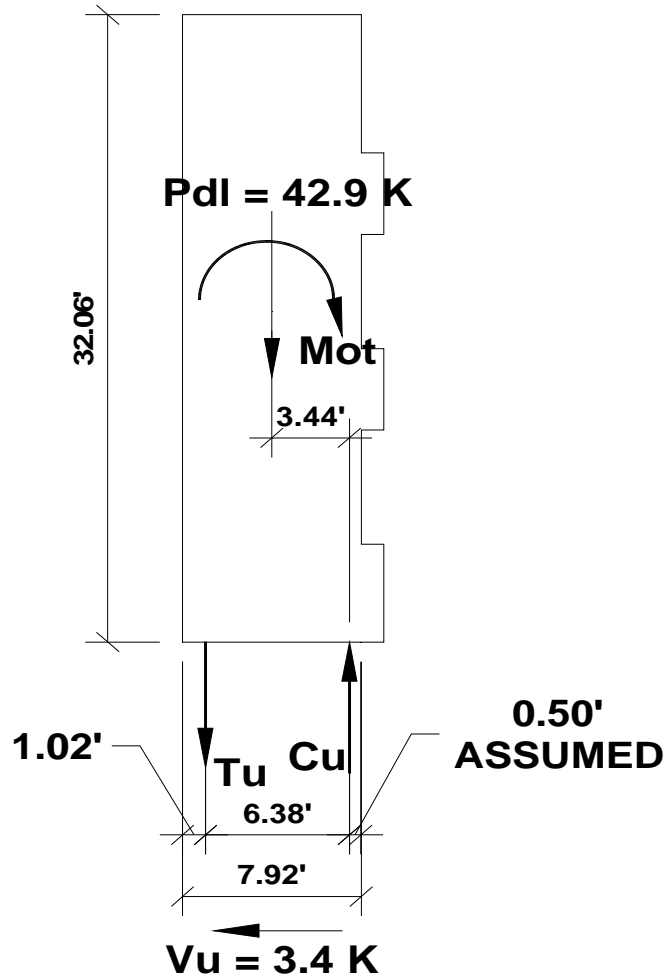


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**Overtuning Analysis for the Wallpanel "WP5"**



$M_{OT} = \underline{43.70 \text{ 'K}}$  &  $V_u = \underline{3.4 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (42.9 \text{ K} \times 3.44') = \underline{147.58 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{43.6965 \text{ 'K} - (0.85 \times 147.58 \text{ 'K})}{6.38'} = \underline{-12.8 \text{ K}}$

**NO UPLIFT !**

Calculation of Pdl:

Self Weight of WP = 42.9 kips (Refer Sheet "FL47")

Total PDL = 42.9 kips



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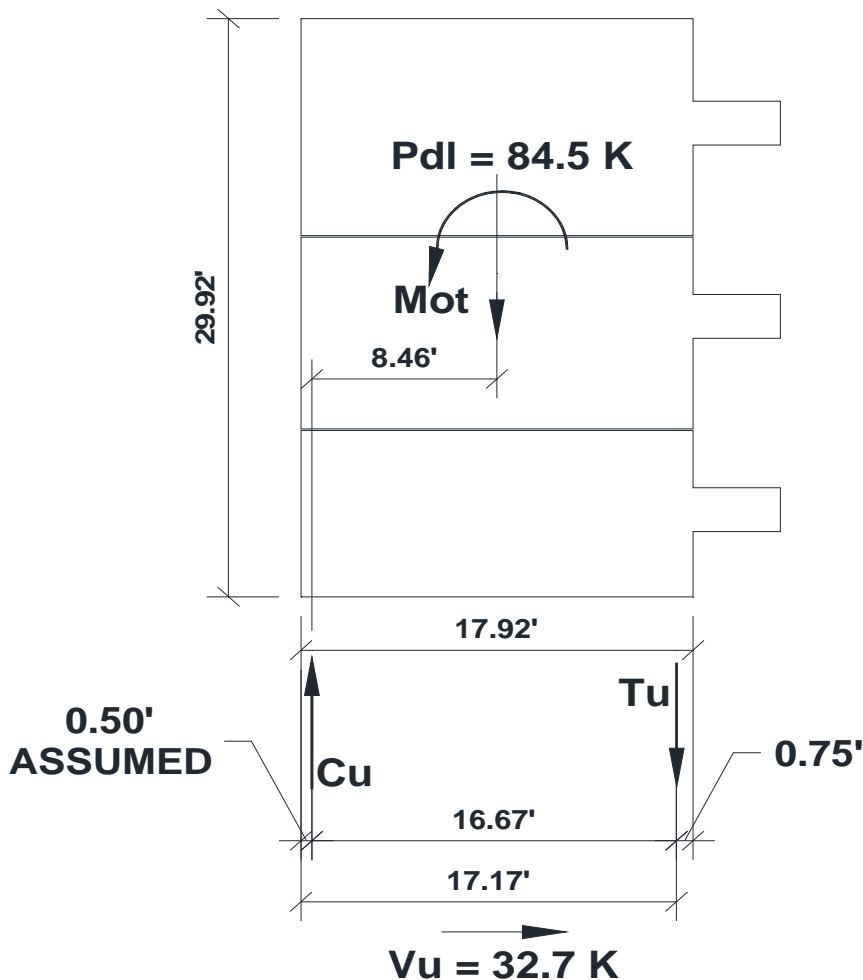
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**Overturing Analysis for the Wallpanel "WP6"**



$M_{OT} = \underline{441.57 \text{ 'K}}$  &  $V_u = \underline{32.7 \text{ K}}$  (Refer Sheet 'LA1.06')

$M_R = (84.5 \text{ K} \times 8.46') = \underline{714.87 \text{ 'K}}$

w /Load Combination : 0.85 DL ± 1.0 E

$T_u = \frac{441.5741 \text{ 'K} - (0.85 \times 714.87 \text{ 'K})}{16.67'} = \underline{-10.0 \text{ K}}$

**NO UPLIFT!**

Calculation of Pdl:

Self Weight of WP = 84.5 kips (Refer Sheet "FL49")

Total PDL = 84.5 kips


**MAINE MEDICAL VISITOR PS**

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**DESIGN CRITERIA**

Code and Standards .....	DC1
Material Properties .....	DC1
Design Load and Stability Data Information .....	DC2
Structural Load Calculations .....	DC4



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					PORTLAND ME	51267
		DATE	DWN. BY	DATE	CHK. BY	SHEET
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## Design Criteria

### Codes and Standards:

- Maine Uniform Building Code.
- International Building Code (IBC), 2015 edition with ME Amendments.
- International Existing Building Code (IEBC), 2015 edition with ME Amendments.
- International Energy Conservation Code (IECC), 2009 edition with ME Amendments.
- Minimum Design Loads for Buildings and Other Structures – ASCE/SEI 7-10.
- Building Code Requirements for Structural Concrete - ACI 318-14
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62., Standard for Ventilation and Indoor Air Quality, 2013 edition
- PCI Design Handbook – Seventh Edition
- Manual of Steel Construction - AISC, 14th Edition (LRFD Design)
- CRSI Handbook 2002 – Concrete Reinforcing Steel Institute
- ACI Manual of Concrete Practice 2016 (Part 1 through Part 5) – American Concrete Institute.
- Structural Welding Code – Steel ANSI/AWS D1.1 - Latest Edition
- Structural Welding Code – Reinforcing Steel AWS D1.4 - Latest Edition
- NFPA 1, Uniform Fire Code, 2006 Edition with ME Amendments
- NFPA 13, Standard for Installation of Sprinkler Systems, 2016 Edition
- NFPA 101, Life Safety Code, 2009 Edition with ME Amendments

### Material Properties:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>● Minimum 28-day concrete compressive strength:</li> <br/> <li>● Unit Weight of Concrete:</li> <li>● Deformed Reinforcing Bars:</li> <li>● Low-Alloy-Steel Reinforcing Bars:<br/>(Re-inforcing to be welded)</li> <li>● Prestressing Strand:</li> <br/> <li>● Welded Plain Wire Reinforcing:</li> <li>● Welded Deformed Wire Reinforcing:</li> <li>● Connection Materials:             <ol style="list-style-type: none"> <li>1. Steel Shapes and Plates:</li> <li>2. Bolts:</li> <li>3. Threaded Rods:</li> <li>4. Welding Electrodes:</li> </ol> </li> <li>● Carbon Steel to Carbon Steel:</li> </ul> | <ul style="list-style-type: none"> <li>5000 psi for DT's &amp; Spandrels</li> <li>6000 psi for Columns &amp; Shearwalls</li> <li>150 pcf</li> <li>ASTM A615, Grade 60</li> <li>ASTM A706, Grade 60</li> <br/> <li>ASTM A416 Grade 270,<br/>Low relaxation, <math>f_{pu}=270</math> ksi</li> <li>ASTM A185, Grade 65</li> <li>ASTM 1064, Grade 65</li> <br/> <li>ASTM A36 Grade 36</li> <li>ASTM A325 Grade 36</li> <li>ASTM A36 Grade 36</li> <br/> <li>E70 Electrodes (70 ksi)</li> </ul> |
|--|--|



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**Design Load and Stability Data Information**

**A: Design Loads**

1. Design Codes: International Building Code (IBC), 2015 edition with ME Amendments.  
 ASCE 7 - 10  
 ACI 318 - 14  
 PCI Design Handbook 7th Edition

2. Dead Loads: (Normal weight of Concrete - 150 pcf)  
 Precast Member Self Weight 79.8 psf Double Tee (12DT30)  
 Superimposed DL 5.0 psf  
 Photovoltaic array on Roof (applied to columns and affected walls only) 15.0 psf

3. Live Loads: **As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017**  
 Parking Floor 40 psf  
 Stairs & Elevator Lobbies 100 psf  
 Stair Roofs 20 psf  
 Parking Garage roof Roof Snow Load plus Parking

4. Live Load Reduction:  
 Where permitted, the live loads above have been reduced in accordance with Section 1607.10 of the Building Code.

5. Snow Loads: **As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017**  
 Ground Snow Load, pg: 60.0 psf  
 Importance Factor, I: 1.0  
 Calculated Snow Load, pf : 50.4 psf (See Sheet 'DC10' for derivation of Snow Loads)  
 Rain on Snow Surcharge : - psf  
 Total Snow Load : 50.4 psf

Snow Drift have been considered in accordance with ASCE/SEI 7-10 for design calc.  
 (See Sheet 'DC10' for derivation of Snow Loads)

6. Miscellaneous Loads:  
 Note: No Miscellaneous loads

7. Soil Loads:  
 Note: No Soil loads to the Precast Deck

8. Blast Loads:  
 Note: No Blast loads

9. Bumper Loads: (Per IBC 2015 section 1607.8.3/ASCE 7-10 section 4.5.3)  
 Load from Vehicle Bumpers 6.0 kips (Applied b/w 18/27" above the Floor/Ramp surface)

**B: Construction Type/Fire Resistance**

- |  |   |   |
|--|---|---|
| 1. Construction Type = IIA                                     | ← | <b>As Per Existing Building Code Report Dated on SEP.28, 2017</b> |
| 2. Fire Resistance (per IBC 2015 TABLE 601)                    |   |   |
| a. Floor construction (Double tees) - 1 HRS.                   |   |   |
| b. Structural Frame (Columns,Girders,Beams,Spandrels) - 1 HRS. |   |   |
| c. Bearing Walls - 1 HRS.                                      |   |   |



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**C: Stability data**

1. Location:

City, State, ZIP      Portland , ME  
 Lat.                      43° 65' 43" N  
 Long.                     70° 27' 62" W

2. Lateral Load Resisting System:      **As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017**

Factory Mutual Spec?      Y/N                      N

East/West      Bearing Wall system with Intermediate Precast Shear walls      R=      4  
 North/South      Building Frame system with Intermediate Precast Shear walls      R=      5

Note: Per ASCE 7-10, Table 12.2-1 - R values for Lateral Load Resisting System is arrived at.

3. Wind Loads:      **As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017**

a. Lateral Loads:                      Using Method 2 - Analytical Procedure  
 Note: Lateral Loads due to Wind Loads do not govern

Ultimate Wind Speed, V :      120    mph  
 Importance Factor I :              1  
 Exposure Category :                B

Design Wind Loads                  34.3    psf                              (See sheet 'DC7')

b. Components and Cladding Loads    18.6    psf      Pressure @ Zone 4 or 5  
 (For 500 sft)                              -21.7    psf      Suction @ Zone 4  
    -31.0    psf      Suction @ Zone 5      } (See Sht. 'DC8')

4. Seismic Loads:      **As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017**

a. Lateral Loads (Using Equivalent Lateral Force Procedure)

Seismic Occupancy Category:      II  
 Seismic Design Category:            B  
 Site Class:                              D  
 S<sub>DS</sub>      =      0.258    g  
 S<sub>D1</sub>      =      0.125    g  
 Importance Factor I:                      1

Design Base Shear:

East/West ('X' Direction) =      822.3    kips      (See LA Sheet 'LA1.28')

North/South ('Y' Direction) =      657.9    kips      (See LA Sheet 'LA1.37')

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**STRUCTURAL CALCULATIONS**

FOR

**MAINE MEDICAL VISITOR PS**

PORTLAND, ME

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SHEET NO. DC5

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**Code Search****Code:** International Building Code 2015**Occupancy:**

Occupancy Group = S Storage

**Risk Category & Importance Factors:**

Risk Category = II

Wind factor = 1.00

Snow factor = 1.00

Seismic factor = 1.00

**Type of Construction:**

Fire Rating:

Roof = 1.0 hr

Floor = 1.0 hr

**Building Geometry:**Roof angle ( $\theta$ ) 0.00 / 12 0.0 deg

Building length (L) 212.5 ft

Least width (B) 123.0 ft

Mean Roof Ht (h) 100.9 ft

Parapet ht above grd 104.9 ft

Minimum parapet ht 4.0 ft

**Live Loads:****Roof** 0 to 200 sf: 20 psf

200 to 600 sf: 24 - 0.02Area, but not less than 12 psf

over 600 sf: 12 psf

**Floor:**

Typical Floor 40 psf

Partitions N/A

Stairs and exit ways 100 psf

**Wind Loads :**

ASCE 7- 10

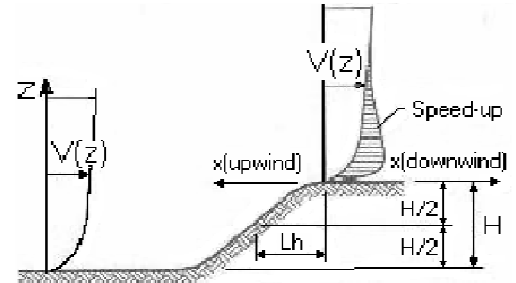
As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017

Ultimate Wind Speed	120 mph
Nominal Wind Speed	93 mph
Risk Category	II
Exposure Category	B
Enclosure Classif.	Open Building
Internal pressure	+/-0.00
Directionality (Kd)	0.85
Kh case 1	0.991
Kh case 2	0.991
Type of roof	Monoslope

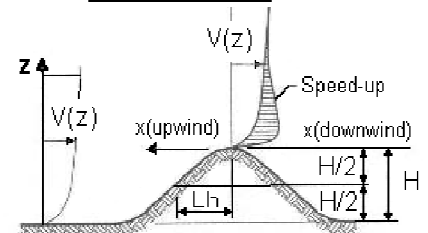
**Topographic Factor (Kzt)**

Topography	Flat
Hill Height (H)	0.0 ft
Half Hill Length (Lh)	0.0 ft
Actual H/Lh =	0.00
Use H/Lh =	0.00
Modified Lh =	0.0 ft
From top of crest: x =	50.0 ft
Bldg up/down wind?	downwind
H/Lh= 0.00	K <sub>1</sub> = 0.000
x/Lh = 0.00	K <sub>2</sub> = 0.000
z/Lh = 0.00	K <sub>3</sub> = 1.000
At Mean Roof Ht:	K <sub>zt</sub> = (1+K <sub>1</sub> K <sub>2</sub> K <sub>3</sub> ) <sup>2</sup> = 1.00

H < 60ft; exp B  
 ∴ K<sub>zt</sub> = 1.0



**ESCARPMENT**



**2D RIDGE or 3D AXISYMMETRICAL HILL**

**Gust Effect Factor**

h =	100.9 ft
B =	123.0 ft
/z (0.6h) =	60.5 ft

Flexible structure if natural frequency < 1 Hz (T > 1 second).

However, if building h/B < 4 then probably rigid structure (rule of thumb).

h/B = 0.82 Therefore, probably rigid structure

**G = 0.85** Using rigid structure default

**Rigid Structure**

$\bar{e}$ =	0.33
l =	320 ft
Z <sub>min</sub> =	30 ft
c =	0.30
g <sub>Q</sub> , g <sub>v</sub> =	3.4
L <sub>z</sub> =	391.7 ft
Q =	0.83
I <sub>z</sub> =	0.27
G =	0.83

**Flexible or Dynamically Sensitive Structure**

Natural Frequency (η <sub>1</sub> ) =	0.0 Hz		
Damping ratio (β) =	0		
/b =	0.45		
/α =	0.25		
V <sub>z</sub> =	92.2		
N <sub>1</sub> =	0.00		
R <sub>n</sub> =	0.000		
R <sub>n</sub> =	28.282	η =	0.000
R <sub>B</sub> =	28.282	η =	0.000
R <sub>L</sub> =	28.282	η =	0.000
g <sub>R</sub> =	0.000		
R =	0.000		
G =	0.000		
		h =	100.9 ft

**Wind Loads - MWFRS all h (Enclosed/partially enclosed only)**

Open Building - procedure doesn't apply

Kh (case 2) =	0.99	h =	100.9 ft	GCpi =	+/-0.00
Base pressure (q <sub>n</sub> ) =	<b>31.0 psf</b>	ridge ht =	100.9 ft	G =	0.85
Roof Angle (θ) =	0.0 deg	L =	212.5 ft	qi = qh	
Roof tributary area - (h/2)*L:	10715 sf	B =	123.0 ft		
(h/2)*B:	6202 sf				

**Ultimate Wind Surface Pressures (psf)**

Surface	Wind Normal to Ridge				Wind Parallel to Ridge				
	B/L = 0.58	h/L = 0.82			L/B = 1.73	h/L = 0.47			
	Cp	q <sub>n</sub> GC <sub>p</sub>	w/+q <sub>i</sub> GC <sub>pi</sub>	w/-q <sub>n</sub> GC <sub>pi</sub>	Dist.*	Cp	q <sub>n</sub> GC <sub>p</sub>	w/+q <sub>i</sub> GC <sub>pi</sub>	w/-q <sub>n</sub> GC <sub>pi</sub>
Windward Wall (WW)	0.80	21.1	see table below			0.80	21.1	see table below	
Leeward Wall (LW)	-0.50	-13.2	-13.2	-13.2		-0.35	-9.4	-9.4	-9.4
Side Wall (SW)	-0.70	-18.5	-18.5	-18.5		-0.70	-18.5	-18.5	-18.5
Leeward Roof (LR)		**				Included in windward roof			
Neg Windward Roof: 0 to h/2*	-0.99	-26.1	-26.1	-26.1	0 to h/2*	-0.90	-23.7	-23.7	-23.7
h/2 to h*	-0.77	-20.4	-20.4	-20.4	h/2 to h*	-0.90	-23.7	-23.7	-23.7
h to 2h*	-0.63	-16.57	-16.57	-16.57	h to 2h*	-0.50	-13.2	-13.2	-13.2
Pos/min windward roof press.	-0.18	-4.7	-4.7	-4.7	> 2h*	-0.30	-7.9	-7.9	-7.9
					Min press.	-0.18	-4.7	-4.7	-4.7

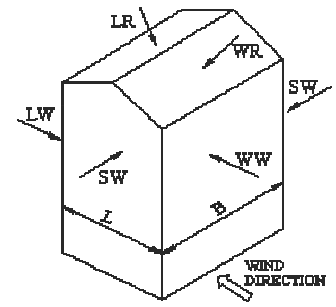
\*\*Roof angle < 10 degrees. Therefore, leeward roof is included in windward roof pressure zones.

\*Horizontal distance from windward edge

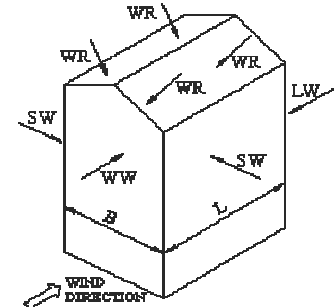
For monoslope roofs, entire roof surface is either windward or leeward surface.

**Windward Wall Pressures at "z" (psf)**

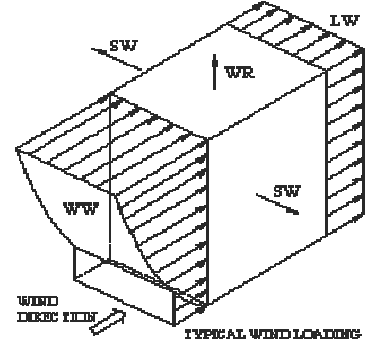
z	Kz	Kzt	Windward Wall			Combined WW + LW	
			q <sub>z</sub> GC <sub>p</sub>	w/+q <sub>i</sub> GC <sub>pi</sub>	w/-q <sub>n</sub> GC <sub>pi</sub>	Normal to Ridge	Parallel to Ridge
0 to 15'	0.57	1.00	12.2	12.2	12.2	25.4	21.6
20.0 ft	0.62	1.00	13.3	13.3	13.3	26.5	22.6
25.0 ft	0.67	1.00	14.2	14.2	14.2	27.4	23.5
30.0 ft	0.70	1.00	14.9	14.9	14.9	28.1	24.3
40.0 ft	0.76	1.00	16.2	16.2	16.2	29.4	25.6
50.0 ft	0.81	1.00	17.3	17.3	17.3	30.5	26.6
60.0 ft	0.85	1.00	18.2	18.2	18.2	31.4	27.5
70.0 ft	0.89	1.00	19.0	19.0	19.0	32.2	28.4
80.0 ft	0.93	1.00	19.8	19.8	19.8	32.9	29.1
90.0 ft	0.96	1.00	20.4	20.4	20.4	33.6	29.8
100.0 ft	0.99	1.00	21.1	21.1	21.1	34.2	30.4
h= 100.9 ft	0.99	1.00	21.1	21.1	21.1	34.3	30.5
ridge = 100.9 ft	0.99	1.00	21.1	21.1	21.1	34.3	30.5



WIND NORMAL TO RIDGE



WIND PARALLEL TO RIDGE



UNEVEN WIND LOADING

NOTE:  
See figure in ASCE7 for the application of full and partial loading of the above wind pressures. There are 4 different loading cases.

**Parapet**

z	Kz	Kzt	qp (psf)
104.9 ft	1.00	1.00	31.4

Windward parapet: 47.1 psf (GCpn = +1.5)  
Leeward parapet: -31.4 psf (GCpn = -1.0)

Windward roof overhangs ( add to windward roof pressure) : 21.1 psf (upward)

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**Ultimate Wind Pressures**

**Wind Loads - Components & Cladding : h > 60'**

Open Building - procedure doesn't apply

Kh (case 1) = 0.99 h = 100.9 ft  
 Base pressure (qh) = 31.0 psf a = 12.3 ft  
 Minimum parapet ht = 4.0 ft GCpi = +/-0.00  
 Roof Angle (θ) = 0.0 deg qi = qh = 31.0 psf  
 Type of roof = Monoslope

Roof Area	GCp			Surface Pressure (psf)			User input	
	10 sf	100 sf	500 sf	10 sf	100 sf	500 sf	75 sf	500 sf
Negative Zone 1	-1.40	-1.11	-0.90	-43.5	-34.3	-27.9	-35.5	-27.9
Negative Zone 2	-2.30	-1.89	-1.60	-71.4	-58.6	-49.7	-60.2	-49.7
Negative Zone 3	-2.30	-1.89	-1.60	-71.4	-58.6	-49.7	-60.2	-49.7
Positive Zones 1-3	-	-	-	16.0	16.0	16.0	16.0	16.0

Negative zone 3 = zone 2, since parapet >= 3ft.

**Parapet**

qp = 31.4 psf

CASE A = pressure towards building (pos)  
 CASE B = pressure away from bldg (neg)

Solid Parapet Pressure	Surface Pressure (psf)			User input
	10 sf	100 sf	500 sf	40 sf
CASE A : Interior zone:	100.4	82.8	69.1	90.6
Corner zone:	100.4	82.8	69.1	90.6
CASE B : Interior zone:	-56.5	-48.6	-40.8	-53.1
Corner zone:	-84.7	-67.5	-50.2	-77.3

**Walls**

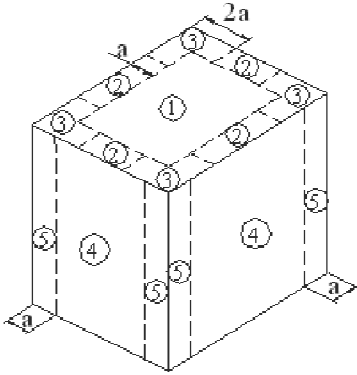
Area	GCp			Surface Pressure at h			User input	
	20 sf	100 sf	500 sf	20 sf	100 sf	500 sf	50 sf	200 sf
Negative Zone 4	-0.90	-0.80	-0.70	-27.9	-24.8	-21.7	-26.2	-23.5
Negative Zone 5	-1.80	-1.40	-1.00	-55.9	-43.5	-31.0	-48.8	-38.1
Positive Zone 4 & 5	0.90	0.75	0.60	27.9	23.3	18.6	25.3	21.3

NOTE: Negative zones 4 & 5 pressures apply to all heights. Positive pressures vary with height, see below.

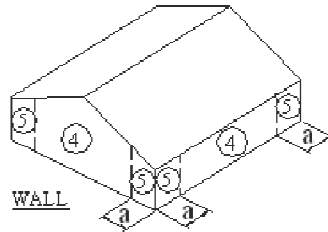
Wall surface pressure at 'z'				Positive zone 4 & 5 (psf)			User input	
z	Kz	Kzt	qz (psf)	20	100	500	50 sf	200 sf
0 to 15'	0.70	1.00	22.0	19.8	16.5	16.0	17.9	16.0
20.0 ft	0.70	1.00	22.0	19.8	16.5	16.0	17.9	16.0
25.0 ft	0.70	1.00	22.0	19.8	16.5	16.0	17.9	16.0
30.0 ft	0.70	1.00	22.0	19.8	16.5	16.0	17.9	16.0
40.0 ft	0.76	1.00	23.8	21.4	17.9	16.0	19.4	16.3
50.0 ft	0.81	1.00	25.4	22.9	19.1	16.0	20.7	17.4
60.0 ft	0.85	1.00	26.8	24.1	20.1	16.1	21.8	18.3
70.0 ft	0.89	1.00	28.0	25.2	21.0	16.8	22.8	19.2
80.0 ft	0.93	1.00	29.1	26.1	21.8	17.4	23.7	19.9
90.0 ft	0.96	1.00	30.0	27.0	22.5	18.0	24.5	20.6
100.0 ft	0.99	1.00	31.0	27.9	23.2	18.6	25.2	21.2
h = 100.9 ft	0.99	1.00	31.0	27.9	23.3	18.6	25.3	21.3
ridge = 100.9 ft	0.99	1.00	31.0	27.9	23.3	18.6	25.3	21.3



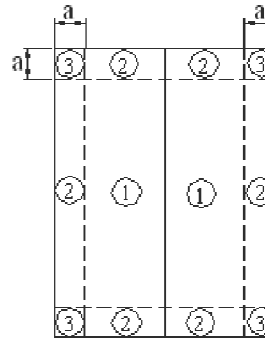
**Location of C&C Wind Pressure Zones**



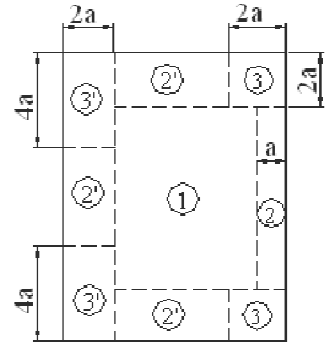
Roofs w/  $\theta \leq 10^\circ$   
and all walls  
 $h > 60'$



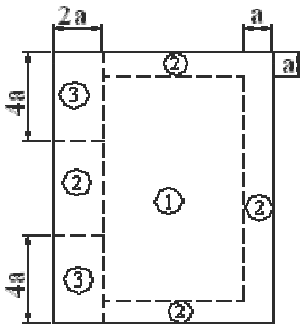
Walls  $h \leq 60'$   
& alt design  $h < 90'$



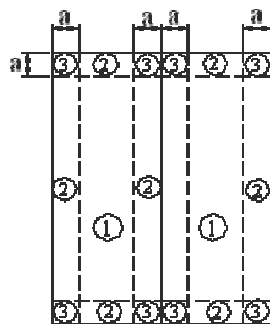
Gable, Sawtooth and  
Multispan Gable  $\theta \leq 7$  degrees &  
Monoslope  $\leq 3$  degrees  
 $h \leq 60'$  & alt design  $h < 90'$



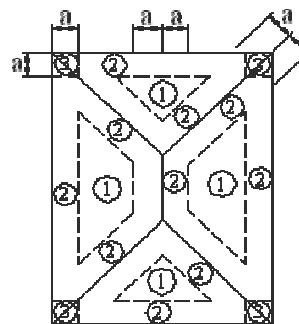
Monoslope roofs  
 $3^\circ < \theta \leq 10^\circ$   
 $h \leq 60'$  & alt design  $h < 90'$



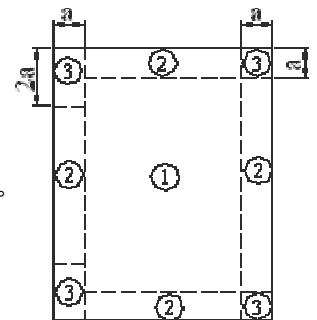
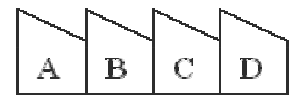
Monoslope roofs  
 $10^\circ < \theta \leq 30^\circ$   
 $h \leq 60'$  & alt design  $h < 90'$



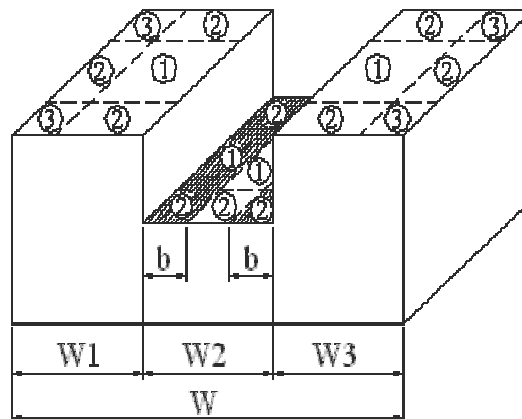
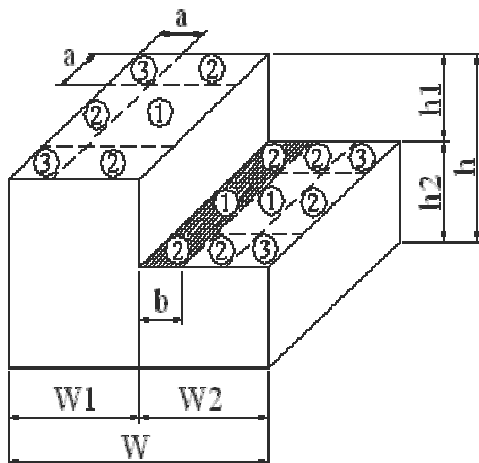
Multispan Gable &  
Gable  $7^\circ < \theta \leq 45^\circ$



Hip  $7^\circ < \theta \leq 27^\circ$



Sawtooth  $10^\circ < \theta \leq 45^\circ$   
 $h \leq 60'$  & alt design  $h < 90'$



Stepped roofs  $\theta \leq 3^\circ$   
 $h \leq 60'$  & alt design  $h < 90'$

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JOB TITLE MAINE MEDICAL VISITOR PS

JOB NO. 51267

SHEET NO. DC10

CALCULATED BY SJK

DATE 2/9/18

CHECKED BY SVH

DATE

**Snow Loads :** ASCE 7-10

Nominal Snow Forces

Roof slope	=	0.0 deg	
Horiz. eave to ridge dist (W)	=	123.0 ft	
Roof length parallel to ridge (L)	=	212.5 ft	
Type of Roof		Monoslope	
Ground Snow Load	Pg =	60.0 psf	
Risk Category	=	II	
Importance Factor	I =	1.0	
Thermal Factor	Ct =	1.20	
Exposure Factor	Ce =	1.0	
Pf = 0.7 * Ce * Ct * I * Pg = 50.4 psf			
Unobstructed Slippery Surface		yes	
Sloped-roof Factor	Cs =	1.00	
Balanced Snow Load	<b>Ps =</b>	<b>50.4 psf</b>	
Rain on Snow Surcharge Angle		2.46 deg	use 0.0
Code Maximum Rain Surcharge		5.0 psf	
Rain on Snow Surcharge	=	0.0 psf	
Ps plus rain surcharge	=	50.4 psf	
Minimum Snow Load	Pm =	20.0 psf	
Uniform Roof Design Snow Load	=	<b>50.4 psf</b>	

As Per sheet S00-01 of Contract Drawings Dated on SEP.29, 2017

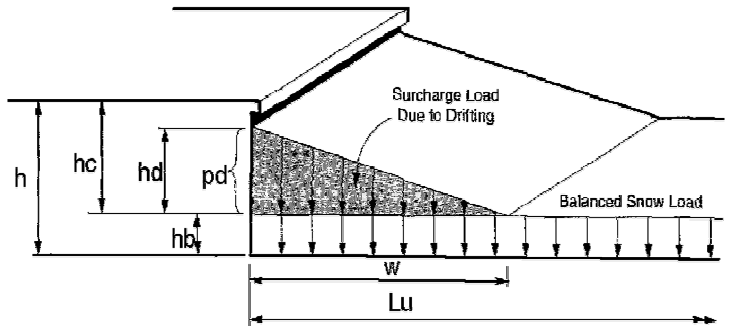
NOTE: Alternate spans of continuous beams and other areas shall be loaded with half the design roof snow load so as to produce the greatest possible effect - see code.

**Windward Snow Drifts 1 - Against walls, parapets, etc more than 15' long**

Upwind fetch	lu =	212.5 ft
Projection height	h =	4.0 ft
Snow density	g =	21.8 pcf
Balanced snow height	hb =	2.31 ft
	hd =	4.44 ft
	hc =	1.69 ft
hc/hb > 0.2 = 0.7	<b>Therefore, design for drift</b>	
Drift height (hc)	=	1.69 ft
Drift width	w =	13.50 ft
Surcharge load:	pd = γ * hd =	<b>36.8 psf</b>
Balanced Snow load:	=	50.4 psf
		87.2 psf

**Windward Snow Drifts 2 - Against walls, parapets, etc > 15'**

Upwind fetch	lu =	123.0 ft
Projection height	h =	4.0 ft
Snow density	g =	21.8 pcf
Balanced snow height	hb =	2.31 ft
	hd =	3.51 ft
	hc =	1.69 ft
hc/hb > 0.2 = 0.7	<b>Therefore, design for drift</b>	
Drift height (hc)	=	1.69 ft
Drift width	w =	13.50 ft
Surcharge load:	pd = γ * hd =	<b>36.8 psf</b>
Balanced Snow load:	=	50.4 psf
		87.2 psf



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JOB TITLE MAINE MEDICAL VISITOR PS

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SHEET NO. DC11

CALCULATED BY SJK

DATE 2/9/18

CHECKED BY SVH

DATE

**Seismic Loads:**

IBC 2015

**'X'-DIRECTION  
(East-West)**

Strength Level Forces

Risk Category : II  
 Importance Factor (I) : 1.00  
 Site Class : D

As Per sheet S00-01 of Contract  
 Drawings Dated on SEP.29, 2017

Ss (0.2 sec) = 24.20 %g  
 S1 (1.0 sec) = 7.80 %g

Fa = 1.600      Sms = 0.387      SDS = 0.258      Design Category = B  
 Fv = 2.400      Sm1 = 0.187      SD1 = 0.125      Design Category = B

Seismic Design Category = **B**

Number of Stories: 10

Structure Type: All other building systems

Horizontal Struct Irregularities: No plan Irregularity

Vertical Structural Irregularities: No vertical Irregularity

Flexible Diaphragms: No

Building System: **Bearing Wall Systems**Seismic resisting system: **Intermediate precast shear walls**System Structural Height Limit: **Height not limited**

Actual Structural Height (hn) = 100.9 ft

**DESIGN COEFFICIENTS AND FACTORS**

Response Modification Coefficient (R) = 4  
 Over-Strength Factor ( $\Omega_0$ ) = 2.5  
 Deflection Amplification Factor (Cd) : 4  
     SDS = 0.258  
     SD1 = 0.125

Seismic Load Effect (E) =  $\rho Q_E \pm 0.2S_{DS} D$  =  $\rho Q_E \pm 0.052D$   
 Special Seismic Load Effect (Em) :  $\Omega_0 Q_E \pm 0.2S_{DS} D$  =  $2.5 Q_E \pm 0.052D$

$\rho$  = redundancy coefficient  
 $Q_E$  = horizontal seismic force  
 D = dead load

**PERMITTED ANALYTICAL PROCEDURES****Simplified Analysis** - Use Equivalent Lateral Force Analysis**Equivalent Lateral-Force Analysis** - Permitted

Building period coef. ( $C_T$ ) = 0.020       $C_u = 1.65$   
 Approx fundamental period (Ta) :  $C_T h_n^x = 0.637 \text{ sec}$        $x = 0.75$        $T_{max} = C_u Ta = 1.051$   
 User calculated fundamental period (T) = 0 sec      Use T = 0.637  
 Long Period Transition Period (TL) = ASCE7 map = 6  
 Seismic response coef. (Cs) =  $S_{DS}/R = 0.065$   
     need not exceed Cs =  $S_{d1} I/RT = 0.049$   
     but not less than Cs =  $0.044 S_{d1} = 0.011$   
     USE Cs = 0.049  
 Design Base Shear V = 0.049W

**Model & Seismic Response Analysis** - Permitted (see code for procedure)**ALLOWABLE STORY DRIFT**

Structure Type: All other structures

Allowable story drift = 0.020hsx where hsx is the story height below level x

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JOB TITLE MAINE MEDICAL VISITOR PS

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SHEET NO. DC12

CALCULATED BY SJK

DATE 2/9/18

CHECKED BY SVH

DATE

**Seismic Loads:**

IBC 2015

**'Y'-DIRECTION  
(North-South)**

Strength Level Forces

Risk Category : II  
 Importance Factor (I) : 1.00  
 Site Class : D

As Per sheet S00-01 of Contract  
 Drawings Dated on SEP.29, 2017

Ss (0.2 sec) = 24.20 %g  
 S1 (1.0 sec) = 7.80 %g

Fa = 1.600      Sms = 0.387      SDS = 0.258      Design Category = B  
 Fv = 2.400      Sm1 = 0.187      SD1 = 0.125      Design Category = B

Seismic Design Category = **B**

Number of Stories: 10

Structure Type: All other building systems

Horizontal Struct Irregularities: No plan Irregularity

Vertical Structural Irregularities: No vertical Irregularity

Flexible Diaphragms: No

Building System: **Building Frame Systems**Seismic resisting system: **Intermediate precast shear walls**System Structural Height Limit: **Height not limited**

Actual Structural Height (hn) = 100.9 ft

**DESIGN COEFFICIENTS AND FACTORS**

Response Modification Coefficient (R) = 5  
 Over-Strength Factor ( $\Omega_0$ ) = 2.5  
 Deflection Amplification Factor (Cd) : 4.5  
 SDS = 0.258  
 SD1 = 0.125

Seismic Load Effect (E) =  $\rho Q_E \pm 0.2S_{DS} D$  =  $\rho Q_E \pm 0.052D$   
 Special Seismic Load Effect (Em) :  $\Omega_0 Q_E \pm 0.2S_{DS} D$  =  $2.5 Q_E \pm 0.052D$

$\rho$  = redundancy coefficient  
 $Q_E$  = horizontal seismic force  
 D = dead load

**PERMITTED ANALYTICAL PROCEDURES****Simplified Analysis** - Use Equivalent Lateral Force Analysis**Equivalent Lateral-Force Analysis** - Permitted

Building period coef. ( $C_T$ ) = 0.020       $C_u = 1.65$   
 Approx fundamental period (Ta) :  $C_T h_n^x = 0.637 \text{ sec}$        $x = 0.75$        $T_{max} = C_u T_a = 1.051$   
 User calculated fundamental period (T) = 0 sec      Use T = 0.637  
 Long Period Transition Period (TL) = ASCE7 map = 6  
 Seismic response coef. (Cs) =  $S_{DS}/R = 0.052$   
 need not exceed Cs =  $S_{d1}/RT = 0.039$   
 but not less than Cs =  $0.044 S_{d1} = 0.011$   
 USE Cs = 0.039  
 Design Base Shear V = 0.039W

**Model & Seismic Response Analysis** - Permitted (see code for procedure)**ALLOWABLE STORY DRIFT**

Structure Type: All other structures

Allowable story drift = 0.020hsx where hsx is the story height below level x

**CODE SUMMARY**

**Code:** International Building Code 2015

**Live Loads:**

Roof 0 to 200 sf: 20 psf  
 200 to 600 sf: 24 - 0.02Area, but not less than 12 psf  
 over 600 sf: 12 psf

Typical Floor 40 psf  
 Partitions N/A  
 Stairs and exit way: 100 psf

**Dead Loads:**

Floor  
 Roof

**Wind Design Data:**

Ultimate Design Wind Speed 120 mph  
 Nominal Design Wind Speed 92.95 mph  
 Risk Category II  
 Mean Roof Ht (h) 100.9 ft  
 Exposure Category B  
 Enclosure Classif. Open Building  
 Internal pressure Coef +/-0.00  
 Directionality (Kd) 0.85

**Roof Snow Loads:**

Design Uniform Roof Snow load = 50.4 psf  
 Flat Roof Snow Load Pf = 50.4 psf  
 Balanced Snow Load Ps = 50.4 psf  
 Ground Snow Load Pg = 60.0 psf  
 Importance Factor I = 1.00  
 Snow Exposure Factor Ce = 1.00  
 Thermal Factor Ct = 1.20  
 Sloped-roof Factor Cs = 1.00  
 Drift Surcharge load Pd =  
 Width of Snow Drift w =

**Earthquake Design Data:**

Risk Category = II  
 Importance Factor I = 1.00  
 Mapped spectral response acceleration Ss = 24.20 %g  
 S1 = 7.80 %g  
 Site Class = D  
 Spectral Response Coef Sds = 0.258  
 Sd1 = 0.125  
 Seismic Design Category = B  
 Basic Structural System = Bearing Wall Systems  
 Seismic Resisting System = Intermediate precast shear wall  
 Design Base Shear V = 0.049W  
 Seismic Response Coef Cs = 0.049  
 Response Modification Factor R = 4  
 Analysis Procedure = Equivalent Lateral-Force Analysis

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JOB TITLE MAINE MEDICAL VISITOR PS

JOB NO. 51267

SHEET NO. DC14

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**CODE SUMMARY- continued****Component and cladding ultimate wind pressure:**

Roof	Area	Surface Pressure (psf)		
		151 sf	< sf <	605 sf
Negative Zone 1		-29.0	-29.0	-29.0
Negative Zone 2		-44.9	-44.9	-29.0
Negative Zone 3		-87.1	-44.9	-29.0
Positive Zone 1		31.7	31.7	31.7
Positive Zone 2		47.5	47.5	31.7
Positive Zone 3		63.3	47.5	31.7

**MAINE MEDICAL VISITOR PS**

**TABLE OF CONTENT**

**FOUNDATION LOADS**

Foundation Layouts ..... FL1

Summary of Column Loads..... FL7

Summary of Shearwall & Litewall Loads ..... FL8

Summary of Wallpanel Loads ..... FL9

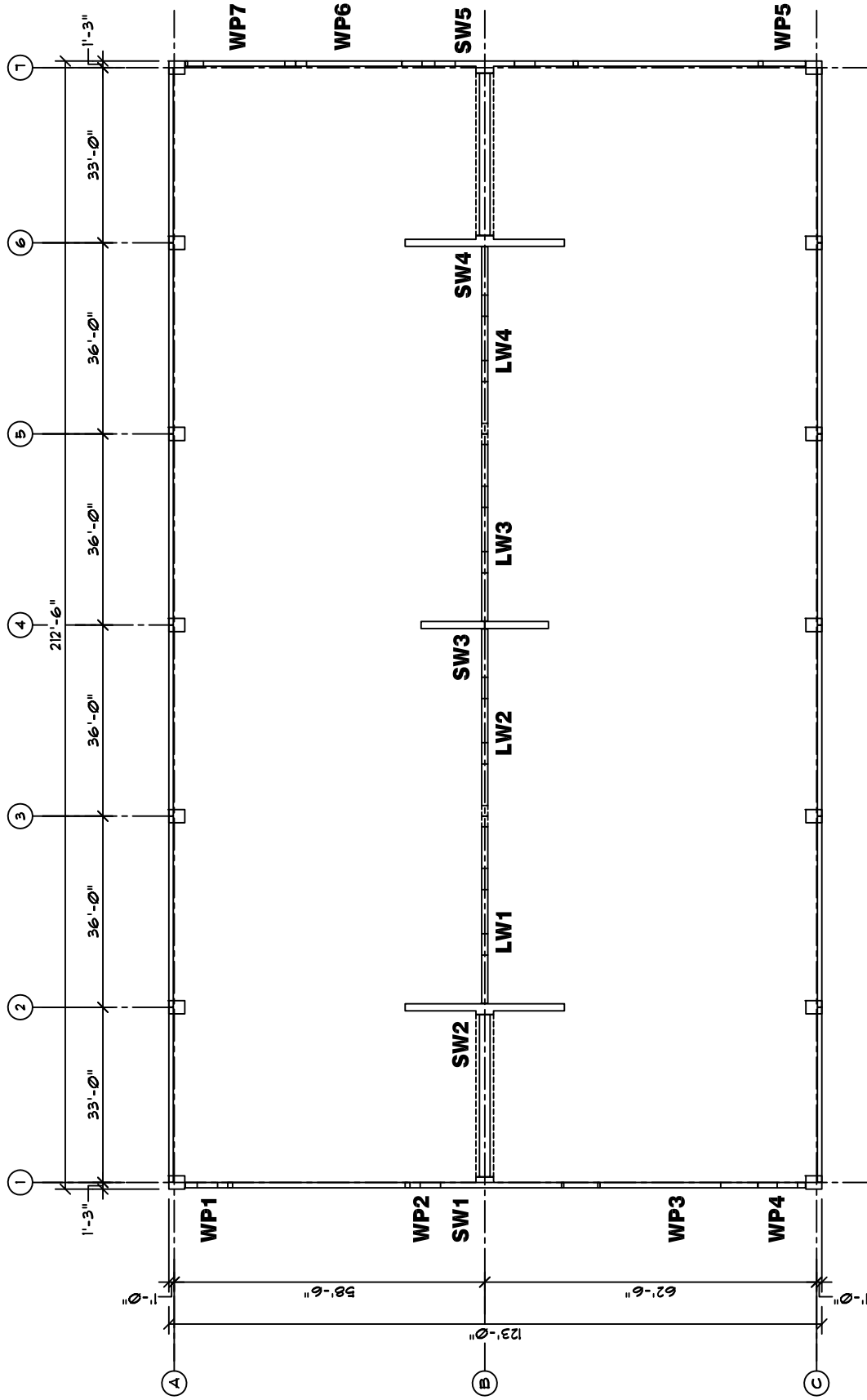
Product Sections and Self Weights..... FL12

Gravity Analysis..... FL14

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 PROJECT: MAINE MEDICAL VISITOR PS  
 DATE: 02/12/18

**GRAVITY LOADS - LAYOUT**

FL1



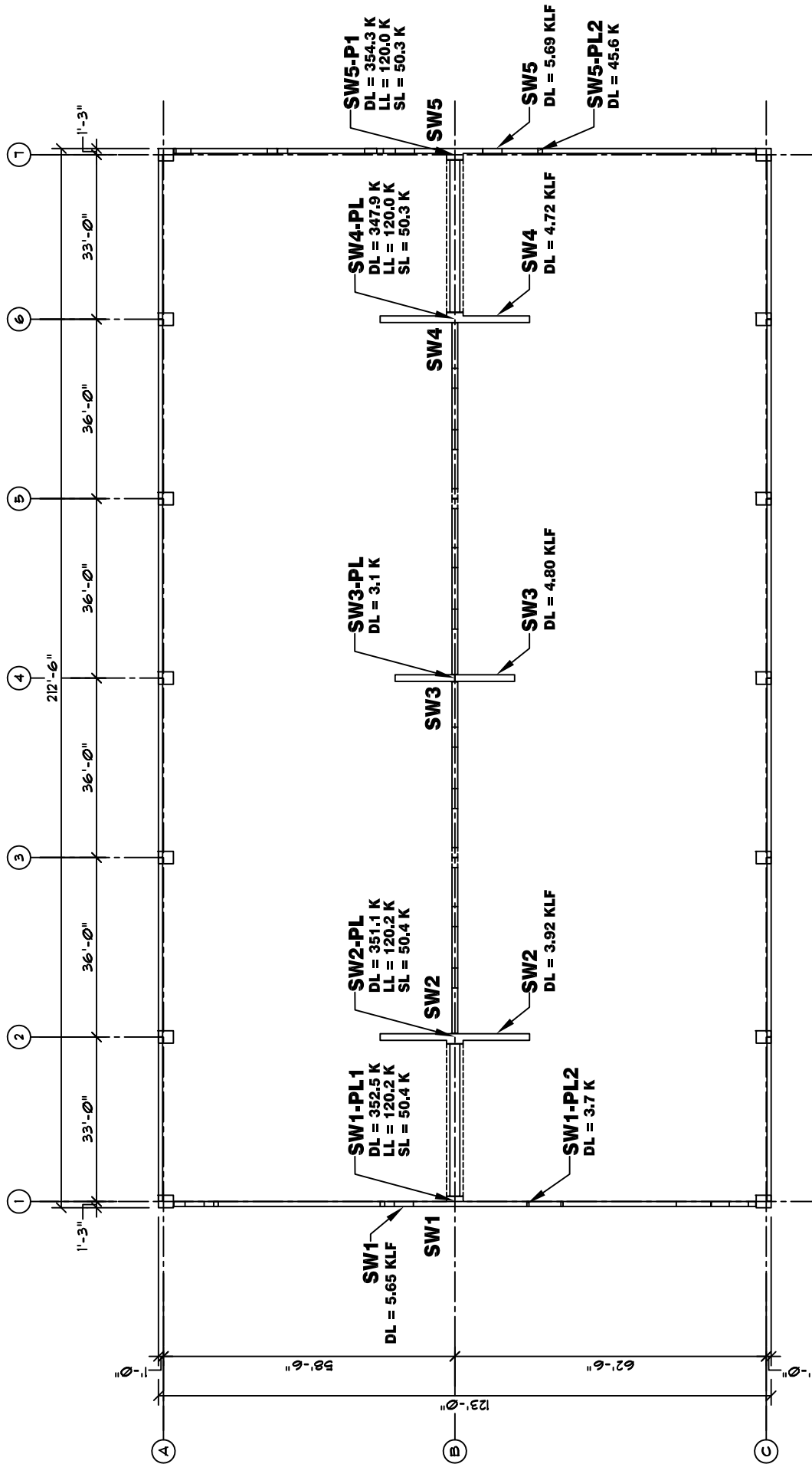
**USER NOTE:**  
 1. ALL LOADS ARE FROM PRECAST COMPONENTS ONLY.  
 2. 'SW' INDICATE SHEARWALLS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.  
 3. 'LW' INDICATE LITEWALLS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.  
 4. 'WP' INDICATE WALLPANELS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.





**GRAVITY LOADS - SHEARWALLS**

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 DATE: 02/12/18

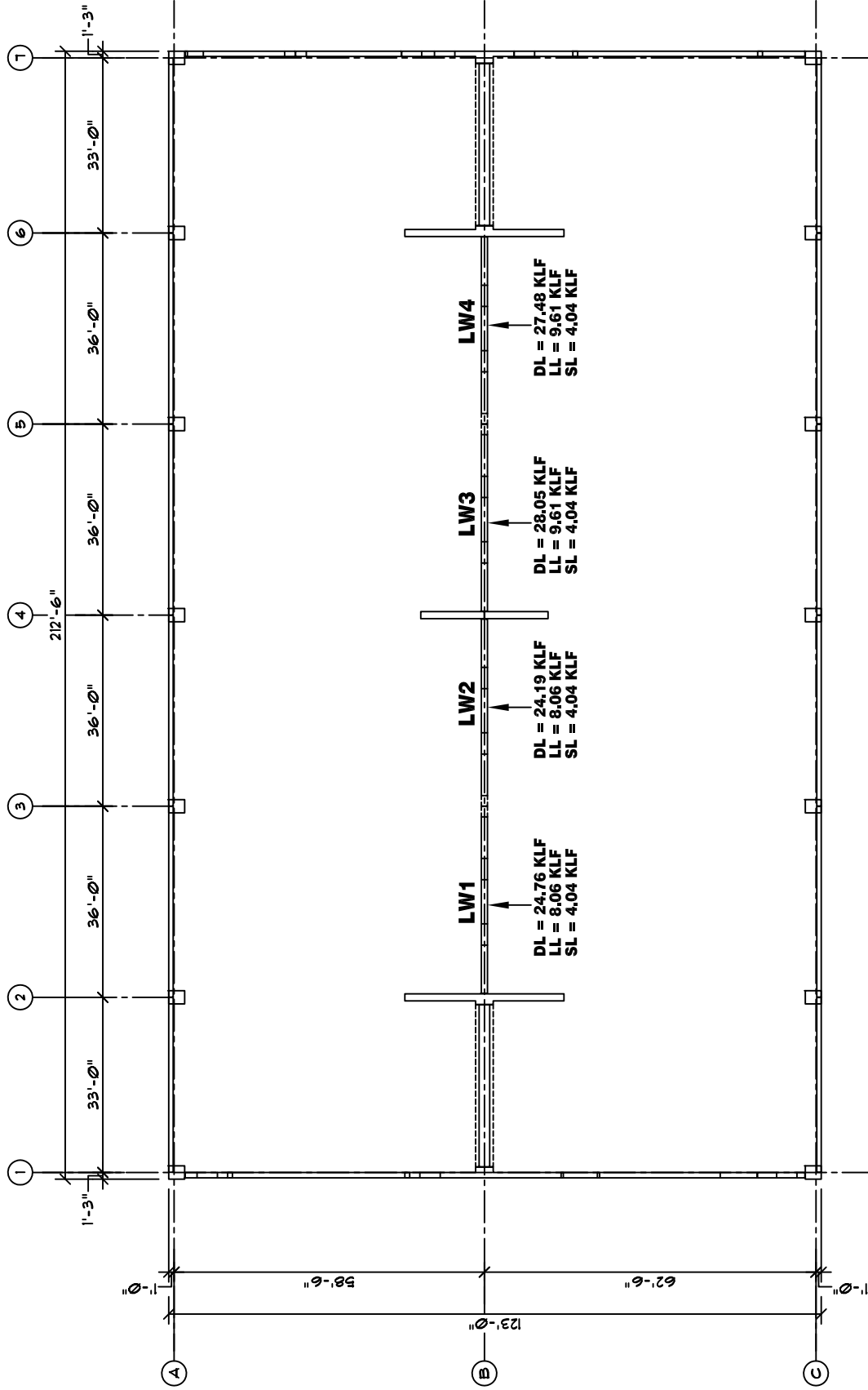


**USER NOTE:**  
 1. ALL LOADS ARE FROM PRECAST COMPONENTS ONLY.  
 2. 'SW' INDICATE SHEARWALLS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.



**GRAVITY LOADS - LITEWALLS**

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 PROJECT: MAINE MEDICAL VISITOR PS  
 DATE: 02/12/18

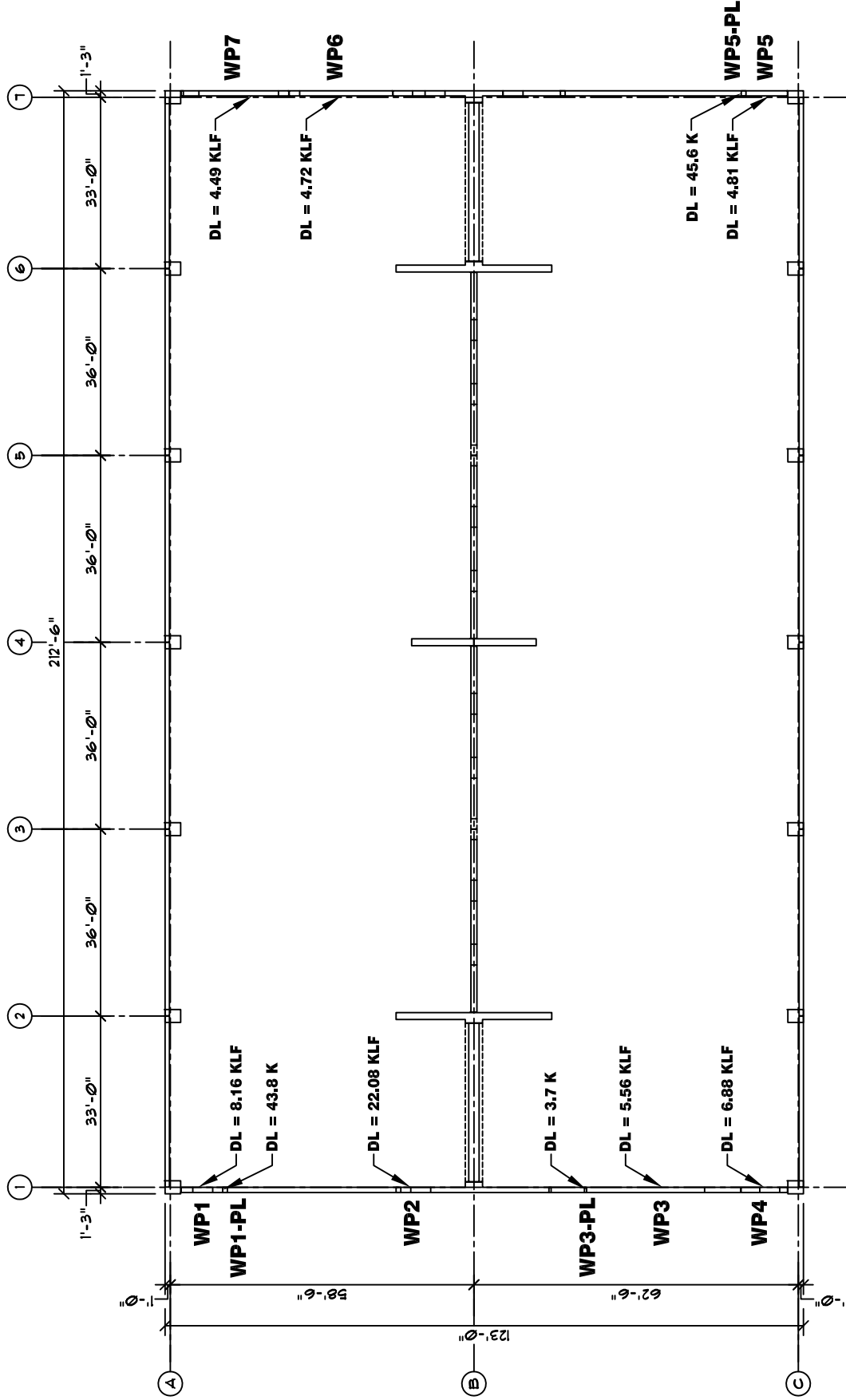


**USER NOTE:**  
 1. ALL LOADS ARE FROM PRECAST COMPONENTS ONLY.  
 2. 'LW' INDICATE LITEWALLS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.

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PROJECT: MAINE MEDICAL VISITOR PS  
DATE: 02/12/18

**GRAVITY LOADS - WALLPANELS**

FL4

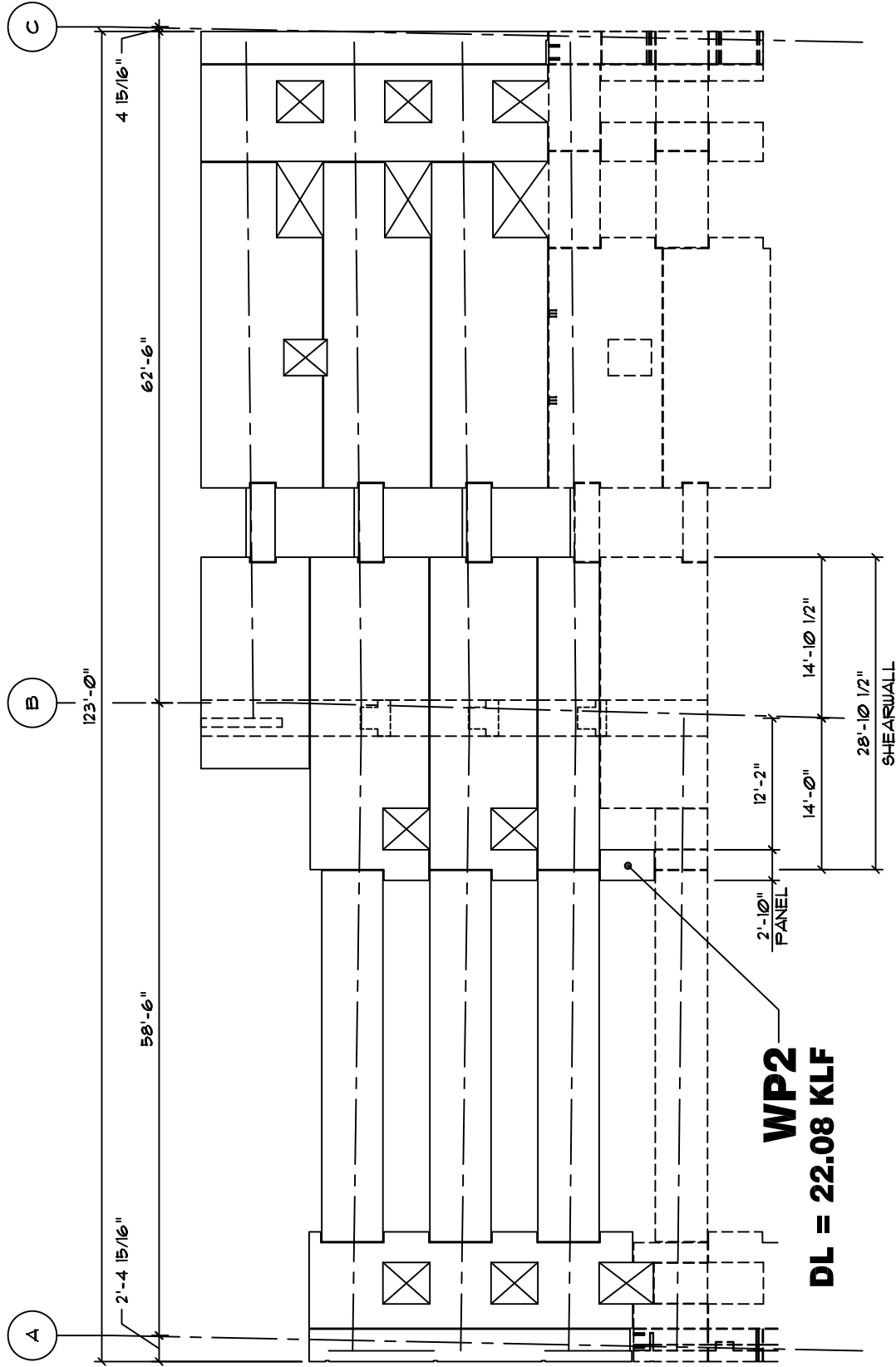


**USER NOTE:**  
1. ALL LOADS ARE FROM PRECAST COMPONENTS ONLY.  
2. 'WP' INDICATE WALLPANELS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.

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PROJECT: MAINE MEDICAL VISITOR PS  
DATE: 02/12/18

**GRAVITY LOADS - WALLPANELS**

FL5



**WP2**  
**DL = 22.08 KLF**

**D WEST EXTERIOR ELEVATION**  
(ALONG GRID 11" LOOKING EAST)  
SEE SHT. F3.4A FOR ARCHITECTURAL BRICK INFO.

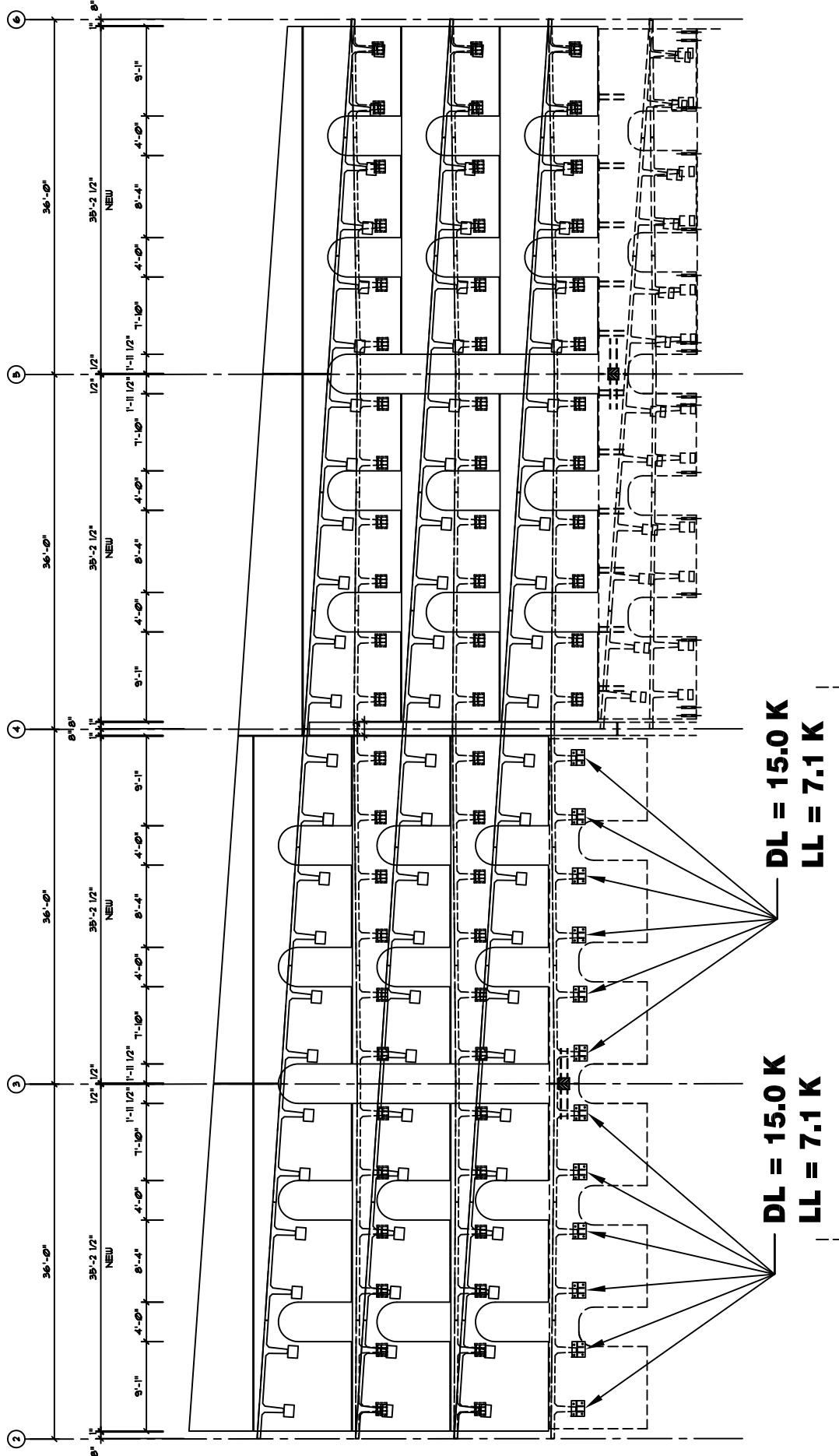
USER NOTE:

1. ALL LOADS ARE FROM PRECAST COMPONENTS ONLY.
2. 'WP' INDICATE WALLPANELS. SEE FOLLOWING SHEETS FOR LOADS AT THESE WALLS.

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 PROJECT: MAINE MEDICAL VISITOR PS  
 DATE: 02/12/18

FL6

**GRAVITY LOADS - EXISTING LITEWALL**



DL = 15.0 K  
 LL = 7.1 K

DL = 15.0 K  
 LL = 7.1 K

Refer Sheet "FL36" & "FL38"

LITEWALL ELEVATION AT LINE B LOOKING NORTH



Project: MAINE MEDICAL VISITOR PS

Date: 02/12/18

Topic: Foundation Loads

ENGR: MMK

**TABLE F-2 (FOUNDATION LOADS-SHEARWALLS)**

SW ID	Loads per Linear ft. of Wall						Conc. Point Load (PL) on Wall						Ult. Base Shear (in kips) K	Ult. Overturning Moment (in ft.kips) L	Uplift (in kips) M
	SERV. DL (kif)	SERV. LL (kif)	SERV. SL (kif)	SERV. DL + LL +SL (kif)	SERV. DL (kips)	SERV. LL (kips)	SERV. SL (kips)	SERV. DL + LL +SL (kips)	SERV. DL (kips)	SERV. LL (kips)	SERV. SL (kips)	SERV. DL + LL +SL (kips)			
	B	C	D	E = B + C + D	F	G	H	J = E + F + G							
A															
SW1	5.65	0.00	0.00	5.65									124.3	2583.21	NO UPLIFT
SW1-PL1					352.5	120.2	50.4	523.1							
SW1-PL2					3.7	0.0	0.0	3.7							
SW2	3.92	0.00	0.00	3.92									163.0	3480.68	NO UPLIFT
SW2-PL					351.1	120.2	50.4	521.7							
SW3	4.80	0.00	0.00	4.80									85.6	1633.31	21.9
SW3-PL					3.1	0.0	0.0	3.1							
SW4	4.72	0.00	0.00	4.72									104.4	2336.05	NO UPLIFT
SW4-PL					347.9	120.0	50.3	518.2							
SW5	5.69	0.00	0.00	5.69									107.5	1825.43	NO UPLIFT
SW5-PL1					354.3	120.0	50.3	524.6							
SW5-PL2					45.6	0.0	0.0	45.6							

**TABLE F-3 (FOUNDATION LOADS-LITEWALLS)**

LW ID	Loads per Linear ft. of Wall						Conc. Point Load (PL) on Wall						Ult. Base Shear (in kips) K	Ult. Overturning Moment (in ft.kips) L	Uplift (in kips) M
	SERV. DL (kif)	SERV. LL (kif)	SERV. SL (kif)	SERV. DL + LL +SL (kif)	SERV. DL (kips)	SERV. LL (kips)	SERV. SL (kips)	SERV. DL + LL +SL (kips)	SERV. DL (kips)	SERV. LL (kips)	SERV. SL (kips)	SERV. DL + LL +SL (kips)			
	B	C	D	E = B + C + D	F	G	H	J = E + F + G							
A															
LW1	24.76	8.06	4.04	36.86									196.3	4829.51	NO UPLIFT
LW2	24.19	8.06	4.04	36.29									200.7	4858.52	NO UPLIFT
LW3	28.05	9.61	4.04	41.70									200.6	4883.23	NO UPLIFT
LW4	27.48	9.61	4.04	41.13									201.3	4926.20	NO UPLIFT







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JOB  
 SHEET NO.  
 CALCULATED BY  
 CHECKED BY  
 SCALE

MAINE MEDICAL VISITOR PS

FL10 OF

MMK DATE 02/12/18

SVH DATE

**SUMMARY OF BUILDING WEIGHTS:**

TOTAL WEIGHT FROM COLUMNS = 5158.4 K (Refer sheet 'FL7' for Column Loads)

SHEARWALL: (Refer Sheet 'FL8' for Shearwall Loads)

SW ID	SW WIDTH (FT.)	DL IN KLF	DL IN KIPS
SW1	22.71	5.65	128.3
SW1-PL1	-	-	352.5
SW1-PL2	-	-	3.7
SW2	30.00	3.92	117.5
SW2-PL	-	-	351.1
SW3	24.00	4.80	115.1
SW3-PL	-	-	3.1
SW4	30.00	4.72	141.6
SW4-PL	-	-	347.9
SW5	22.17	5.69	126.2
SW5-PL1	-	-	354.3
SW5-PL2	-	-	45.6

TOTAL WEIGHT FROM SHEARWALLS = 2086.9 K

LITEWALL: (Refer Sheet 'FL8' for Litewall Loads)

LW ID	LW WIDTH (FT.)	DL IN KLF	DL IN KIPS
LW1	35.21	24.76	871.8
LW2	35.21	24.19	851.7
LW3	35.21	28.05	987.7
LW4	35.21	27.48	967.7

TOTAL WEIGHT FROM LITEWALLS = 3678.9 K

WALLPANEL: (Refer sheet 'FL9' for Wallpanel Loads)

WP ID	WP WIDTH (FT.)	DL IN KLF	DL IN KIPS
WP1	4.08	8.16	33.3
WP1-PL	-	-	43.8
WP2	2.83	22.08	62.5
WP3	23.15	5.56	128.6
WP3-PL	-	-	3.7
WP4	5.10	6.88	35.1
WP5	8.92	4.81	42.9
WP5-PL	-	-	45.6
WP6	17.92	4.72	84.5
WP7	12.82	4.49	57.5

TOTAL WEIGHT FROM WALLPANELS = 537.5 K



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JOB

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SHEET NO.

FL11 OF

CALCULATED BY

MMK DATE 02/12/18

CHECKED BY

SVH DATE

SCALE

$$\begin{aligned} \text{TOTAL WEIGHT} &= 5158.4 \text{ K} + 2086.9 \text{ K} + 3678.9 \text{ K} + 537.5 \text{ K} \\ &= \underline{\underline{11461.7 \text{ K}}} \end{aligned}$$

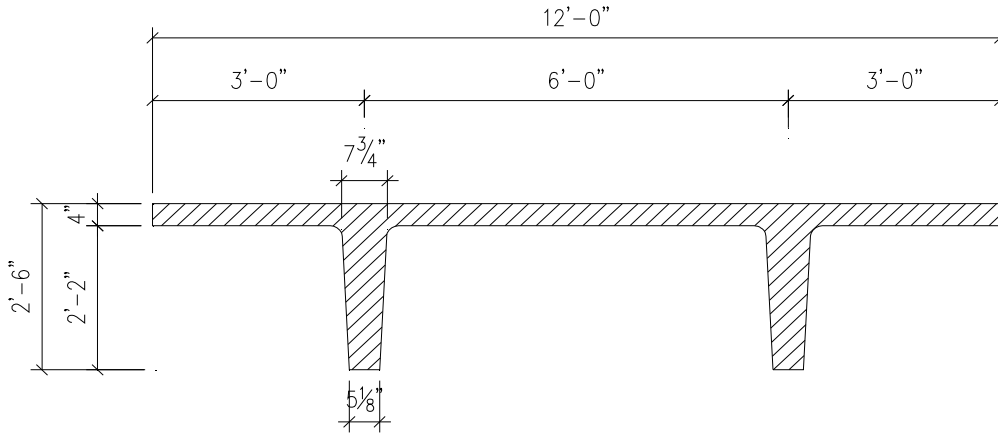


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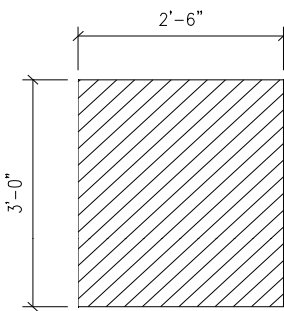
JOB  
 SHEET NO.  
 CALCULATED BY  
 CHECKED BY  
 SCALE

MAINE MEDICAL VISITOR PS	
FL12	OF
MMK	DATE 02/12/18
SVH	DATE

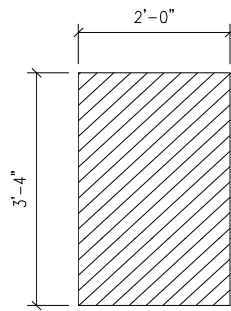
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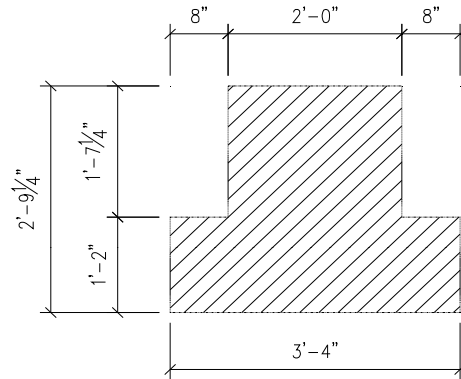
**TYPICAL 12DT30**



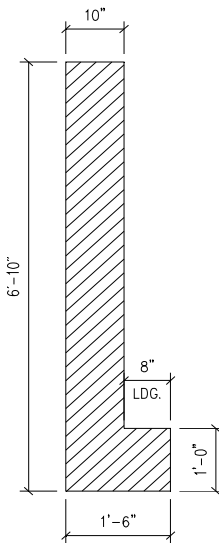
**30C36**



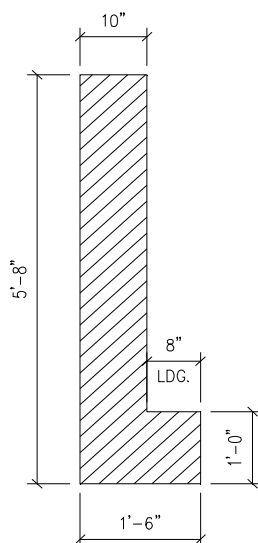
**24C40**



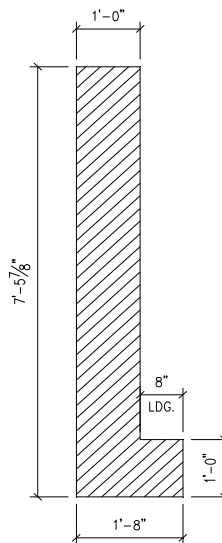
**24IT33.25**



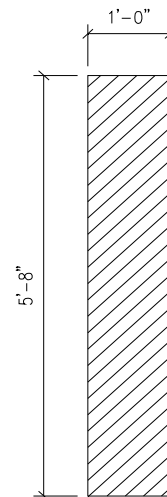
**18LBS82  
LB-SPANDREL**



**18LBS68  
LB-SPANDREL**



**20LBS89.875  
CLOSURE SPANDREL**



**12NLBS68  
NLB-SPANDREL**



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 FL13 OF  
 MMK DATE 02/12/18  
 SVH DATE  
 \_\_\_\_\_

**FOUNDATION LOAD CALCULATIONS - GRAVITY LOADS**

**APPLIED LIVE LOAD:**

DT Floor Loads (Parking) = **40.0 psf**

**SNOW LOAD:**

Flat Roof Snow Load = **50.4 psf** (Refer Sheet "DC10")

**SDL:**

Superimposed DL (SDL) = **5.0 psf** (Refer Contract Drawing "S00-01")

Photovoltaic Array on Roof = **15.0 psf** (Refer Contract Drawing "S00-01")

Metal Screen Load = **0.10 klf** {Assumed 10 psf x 10' (Height)}

**DOUBLE TEES (NORMAL WEIGHT CONCRETE 150 PCF):**

12DT30 AREA = **921.38** IN<sup>2</sup> WT. = **0.080 ksf**

11.17DT30 AREA = **881.54** IN<sup>2</sup> WT. = **0.082 ksf**

11DT30 AREA = **873.38** IN<sup>2</sup> WT. = **0.083 ksf**

10.92DT30 AREA = **869.54** IN<sup>2</sup> WT. = **0.083 ksf**

**INVERTED TEE BEAMS:**

24IT33.25 AREA = **1022.00** IN<sup>2</sup> WT. = **1.06 klf**

**COLUMNS:**

30C36 AREA = **1080.00** IN<sup>2</sup> WT. = **1.13 klf**

24C40 AREA = **960.00** IN<sup>2</sup> WT. = **1.00 klf**

**LOAD BEARING SPANDRELS:**

18LBS82 AREA = **916.00** IN<sup>2</sup> WT. = **0.95 klf**

18LBS68 AREA = **776.00** IN<sup>2</sup> WT. = **0.81 klf**

**CLOSURE SPANDREL (LOAD BEARING):**

20LBS89.875 AREA = **1174.50** IN<sup>2</sup> WT. = **1.22 klf**

**NON-LOAD BEARING SPANDREL:**

12NLBS68 AREA = **816.00** IN<sup>2</sup> WT. = **0.85 klf**

**SHEARWALLS:**

**16.0"** Thick WT. = **0.200 ksf** (16"/12" x 0.15 kcf)

**12.0"** Thick WT. = **0.150 ksf** (12"/12" x 0.15 kcf)

**SHEARWALLS (PILASTER):**

12SWP40 AREA @ 'B/1' = **480.00** IN<sup>2</sup> WT. = **0.50 klf**

8SWP40 AREA @ 'B/2' & 'B/6' = **320.00** IN<sup>2</sup> WT. = **0.33 klf**

15SWP40 AREA @ 'B/7' = **600.00** IN<sup>2</sup> WT. = **0.63 klf**

**LITEWALLS:**

**14.0"** Thick WT. = **0.175 ksf** (14"/12" x 0.15 kcf)

**WALLPANELS:**

**12"** Thick WT. = **0.150 ksf** (12"/12" x 0.15 kcf)

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	DTW	16.50	16.50	16.50		
	TRIBUTARY LENGTH	DTL	29.25	29.25	29.25		
	TRIBUTARY AREA	DTA	482.63	482.63	482.63		
	SELF-WT OF DT	WD1	0.083	0.083	0.083		
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015		
	MISC. DL	WD3	0.005	0.005	0.005		
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040		
	SNOW LOAD	WL2			0.0504		
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1	40.1	40.1	40.1		120.3
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	2.4	2.4	9.7		14.5
	<b>TOTAL LL</b>	LL1	19.4	19.4	19.4		58.2
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	24.3		24.3
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LSL	16.50	16.50	16.50		
	SELF-WT OF BEAM	WD1	0.95	0.95	0.95		
	MISC. DL (Metal Screen Load)	WD2	0.10	0.10	0.10		
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	15.7	15.7	15.7		47.1
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	1.7	1.7	1.7		5.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0		0.0
<b>WALLPANEL</b>							
	TOTAL LENGTH OF WALL	WPL					
	LENGTH OF WALL	WPL					
	HEIGHT OF WALL	WPH					
	SELF-WT OF WALL	WPD1					
	MISC. DL	WPD2					
	MISC. LL	WPL1					
	VOIDS	WPV					
	<b>TOTAL PRECAST DL</b>	DL1					0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2					0.0
	<b>TOTAL LL</b>	LL1					0.0
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL	29.92				
	SELF-WT OF COLUMN	WD1	1.13				
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	33.8				33.8
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0				0.0
	<b>TOTAL LL</b>	LL1	0.0				0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>201.2 K</b>	<b>SUPERIMPOSED DL</b>	<b>19.5 K</b>	<b>LIVE LOAD</b>	<b>58.2 K</b>
						<b>SNOW LOAD</b>	<b>24.3 K</b>

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	DTW	34.50	34.50	34.50		
	TRIBUTARY LENGTH	DTL	29.25	29.25	29.25		
	TRIBUTARY AREA	DTA	1009.13	1009.13	1009.13		
	SELF-WT OF DT	WD1	0.083	0.083	0.083		
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015		
	MISC. DL	WD3	0.005	0.005	0.005		
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040		
	SNOW LOAD	WL2			0.0504		
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1	83.8	83.8	83.8		251.4
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	5.0	5.0	20.2		30.3
	<b>TOTAL LL</b>	LL1	40.4	40.4	40.4		121.2
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	50.9		50.9
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LSL	34.50	34.50	34.50		
	SELF-WT OF BEAM	WD1	0.95	0.95	0.95		
	MISC. DL (Metal Screen Load)	WD2	0.10	0.10	0.10		
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	32.8	32.8	32.8		98.4
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	3.5	3.5	3.5		10.4
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0		0.0
<b>WALLPANEL</b>							
	TOTAL LENGTH OF WALL	WPL					
	LENGTH OF WALL	WPL					
	HEIGHT OF WALL	WPH					
	SELF-WT OF WALL	WPD1					
	MISC. DL	WPD2					
	MISC. LL	WPL1					
	VOIDS	WPV					
	<b>TOTAL PRECAST DL</b>	DL1					0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2					0.0
	<b>TOTAL LL</b>	LL1					0.0
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL	29.92				
	SELF-WT OF COLUMN	WD1	1.13				
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	33.8				33.8
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0				0.0
	<b>TOTAL LL</b>	LL1	0.0				0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>383.6 K</b>	<b>SUPERIMPOSED DL</b>	<b>40.7 K</b>	<b>LIVE LOAD</b>	<b>121.2 K</b>
						<b>SNOW LOAD</b>	<b>50.9 K</b>

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	FT.	36.00	36.00	36.00		
	TRIBUTARY LENGTH	FT.	29.25	29.25	29.25		
	TRIBUTARY AREA	SQFT.	1053.00	1053.00	1053.00		
	SELF-WT OF DT	KSF	0.080	0.080	0.080		
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015		
	MISC. DL	WD3	0.005	0.005	0.005		
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040		
	SNOW LOAD	WL2			0.0504		
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1	84.3	84.3	84.3		<b>252.9</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	5.3	5.3	21.1		<b>31.6</b>
	<b>TOTAL LL</b>	LL1	42.2	42.2	42.2		<b>126.6</b>
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	53.1		<b>53.1</b>
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LSL	36.00	36.00	36.00		
	SELF-WT OF BEAM	WD1	0.95	0.95	0.95		
	MISC. DL (Metal Screen Load)	WD2	0.10	0.10	0.10		
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	34.2	34.2	34.2		<b>102.6</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	3.6	3.6	3.6		<b>10.8</b>
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0		<b>0.0</b>
<b>WALLPANEL</b>							
	TOTAL LENGTH OF WALL	WPL					
	LENGTH OF WALL	WPL					
	HEIGHT OF WALL	WPH					
	SELF-WT OF WALL	WPD1					
	MISC. DL	WPD2					
	MISC. LL	WPL1					
	VOIDS	WPV					
	<b>TOTAL PRECAST DL</b>	DL1					<b>0.0</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2					<b>0.0</b>
	<b>TOTAL LL</b>	LL1					<b>0.0</b>
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL	29.92				
	SELF-WT OF COLUMN	WD1	1.13				
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	33.8				<b>33.8</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0				<b>0.0</b>
	<b>TOTAL LL</b>	LL1	0.0				<b>0.0</b>
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>389.3 K</b>	<b>SUPERIMPOSED DL</b>	<b>42.4 K</b>	<b>LIVE LOAD</b>	<b>126.6 K</b>
						<b>SNOW LOAD</b>	<b>53.1 K</b>

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	FT.	16.50	16.50	16.50		
	TRIBUTARY LENGTH	FT.	29.25	29.25	29.25		
	TRIBUTARY AREA	sq.ft.	482.63	482.63	482.63		
	SELF-WT OF DT	KSF	0.083	0.083	0.083		
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015		
	MISC. DL	WD3			0.005		
	LL (CARS / OTHERS)	WL1		0.040	0.040		
	SNOW LOAD	WL2			0.0504		
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1	40.1	40.1	40.1		120.3
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	2.4	2.4	9.7		14.5
	<b>TOTAL LL</b>	LL1	19.4	19.4	19.4		58.2
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	24.3		24.3
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LBSL	16.50	16.50	16.50		
	SELF-WT OF BEAM	WD1		0.95	0.95		
	MISC. DL (Metal Screen Load)	WD2		0.10	0.10		
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	15.7	15.7	15.7		47.1
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	1.7	1.7	1.7		5.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0		0.0
<b>HORZ. SPANNING WP</b>							
	TOTAL LENGTH OF WALL	WPL	5.97	5.97	5.97	0.5	0.5
	LENGTH OF WALL	WPL	5.97	5.97	5.97	0.5	0.5
	HEIGHT OF WALL	WPH	8.60	9.92	11.23	2.85	4.17
	SELF-WT OF WALL	WPD1	0.15	0.15	0.15	0.15	0.15
	MISC. DL	WPD2					
	MISC. LL	WPL1				3.42' x 4.25'	
	VOIDS	WPV	10.05 Sq.ft	14.54 Sq.ft	14.54 Sq.ft	3.42' x 2.94'	
	<b>TOTAL PRECAST DL</b>	DL1	6.2	6.7	7.9	0.2	0.3
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0	0.0	0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0	0.0	0.0
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL	29.92				
	SELF-WT OF COLUMN	WD1		1.13			
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1	33.8				33.8
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0				0.0
	<b>TOTAL LL</b>	LL1	0.0				0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>222.8 K</b>	<b>SUPERIMPOSED DL</b>	<b>19.5 K</b>	<b>LIVE LOAD</b>	<b>58.2 K</b>
						<b>SNOW LOAD</b>	<b>24.3 K</b>



PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	FT.		16.50	16.50	16.50	
	TRIBUTARY LENGTH	FT.		31.25	31.25	31.25	
	TRIBUTARY AREA	SQFT.		515.63	515.63	515.63	
	SELF-WT OF DT	KSF		0.083	0.083	0.083	
	DL FROM PHOTOVOLTAIC ARRAY	WD2				0.015	
	MISC. DL	WD3		0.005	0.005	0.005	
	LL (CARS / OTHERS)	WL1		0.040	0.040	0.040	
	SNOW LOAD	WL2				0.0504	
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1		42.8	42.8	42.8	128.4
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		2.6	2.6	10.3	15.5
	<b>TOTAL LL</b>	LL1		20.7	20.7	20.7	62.1
	<b>TOTAL SNOW LOAD</b>	SL1		0.0	0.0	26.0	26.0
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LBSL		16.50	16.50	16.50	
	SELF-WT OF BEAM	WD1		0.81	0.81	0.81	
	MISC. DL (Glazing)	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1		13.4	13.4	13.4	40.2
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0	0.0	0.0	0.0
	<b>TOTAL LL</b>	LL1		0.0	0.0	0.0	0.0
<b>WALLPANEL</b>							
	TOTAL LENGTH OF WALL	WPL					
	LENGTH OF WALL	WPL					
	HEIGHT OF WALL	WPH					
	SELF-WT OF WALL	WPD1					
	MISC. DL	WPD2					
	MISC. LL	WPL1					
	VOIDS	WPV					
	<b>TOTAL PRECAST DL</b>	DL1					0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2					0.0
	<b>TOTAL LL</b>	LL1					0.0
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL		32.08			
	SELF-WT OF COLUMN	WD1		1.13			
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1		36.3			36.3
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0			0.0
	<b>TOTAL LL</b>	LL1		0.0			0.0
	<b>TOTAL LOAD ON COLUMN</b>	PRECAST DL	204.9 K	SUPERIMPOSED DL	62.1 K	LIVE LOAD	15.5 K
						SNOW LOAD	26.0 K

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	FT.		34.50	34.50	34.50	
	TRIBUTARY LENGTH	FT.		31.25	31.25	31.25	
	TRIBUTARY AREA	SQFT.		1078.13	1078.13	1078.13	
	SELF-WT OF DT	KSF		0.083	0.083	0.083	
	DL FROM PHOTOVOLTAIC ARRAY	WD2				0.015	
	MISC. DL	KSF		0.005	0.005	0.005	
	LL (CARS / OTHERS)	WL1		0.040	0.040	0.040	
	SNOW LOAD	WL2				0.0504	
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1		89.5	89.5	89.5	<b>268.5</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		5.4	5.4	21.6	<b>32.3</b>
	<b>TOTAL LL</b>	LL1		43.2	43.2	43.2	<b>129.6</b>
	<b>TOTAL SNOW LOAD</b>	SL1		0.0	0.0	54.3	<b>54.3</b>
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LSL		34.50	34.50	34.50	
	SELF-WT OF BEAM	WD1		0.81	0.81	0.81	
	MISC. DL ( Glazing)	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1		28.0	28.0	28.0	<b>84.0</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0	0.0	0.0	<b>0.0</b>
	<b>TOTAL LL</b>	LL1		0.0	0.0	0.0	<b>0.0</b>
<b>WALLPANEL</b>							
	TOTAL LENGTH OF WALL	WPL					
	LENGTH OF WALL	WPL					
	HEIGHT OF WALL	WPH					
	SELF-WT OF WALL	WPD1					
	MISC. DL	WPD2					
	MISC. LL	WPL1					
	VOIDS	WPV					
	<b>TOTAL PRECAST DL</b>	DL1		0.0			<b>0.0</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0			<b>0.0</b>
	<b>TOTAL LL</b>	LL1		0.0			<b>0.0</b>
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL		30.57			
	SELF-WT OF COLUMN	WD1		1.13			
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1		34.5			<b>34.5</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0			<b>0.0</b>
	<b>TOTAL LL</b>	LL1		0.0			<b>0.0</b>
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>387.0 K</b>	<b>SUPERIMPOSED DL</b>	<b>129.6 K</b>	<b>SNOW LOAD</b>	<b>54.3 K</b>

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
<b>DOUBLE TEES</b>							
	TRIBUTARY WIDTH	FT.		36.00	36.00	36.00	
	TRIBUTARY LENGTH	FT.		31.25	31.25	31.25	
	TRIBUTARY AREA	SQFT.		1125.00	1125.00	1125.00	
	SELF-WT OF DT	KSF		0.080	0.080	0.080	
	DL FROM PHOTOVOLTAIC ARRAY	WD2				0.015	
	MISC. DL	KSF		0.005	0.005	0.005	
	LL (CARS / OTHERS)	WL1		0.040	0.040	0.040	
	SNOW LOAD	WL2				0.0504	
	MISC. LL	WL3					
	<b>TOTAL PRECAST DL</b>	DL1		90.0	90.0	90.0	<b>270.0</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		5.6	5.6	22.5	<b>33.8</b>
	<b>TOTAL LL</b>	LL1		45.0	45.0	45.0	<b>135.0</b>
	<b>TOTAL SNOW LOAD</b>	SL1		0.0	0.0	56.7	<b>56.7</b>
<b>LB-SPANDRELS</b>							
	LENGTH OF BEAMS	LSL		36.00	36.00	36.00	
	SELF-WT OF BEAM	WD1		0.81	0.81	0.81	
	MISC. DL (Glazing)	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1		29.2	29.2	29.2	<b>87.6</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0	0.0	0.0	<b>0.0</b>
	<b>TOTAL LL</b>	LL1		0.0	0.0	0.0	<b>0.0</b>
<b>WALLPANEL</b>							
	TOTAL LENGTH OF WALL	WPL					
	LENGTH OF WALL	WPL					
	HEIGHT OF WALL	WPH					
	SELF-WT OF WALL	WPD1					
	MISC. DL	WPD2					
	MISC. LL	WPL1					
	VOIDS	WPV					
	<b>TOTAL PRECAST DL</b>	DL1					<b>0.0</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2					<b>0.0</b>
	<b>TOTAL LL</b>	LL1					<b>0.0</b>
<b>COLUMN</b>							
	LENGTH OF COLUMN	CL		31.06			
	SELF-WT OF COLUMN	WD1		1.13			
	MISC. DL	WD2					
	MISC. LL	WL1					
	<b>TOTAL PRECAST DL</b>	DL1		35.1			<b>35.1</b>
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0			<b>0.0</b>
	<b>TOTAL LL</b>	LL1		0.0			<b>0.0</b>
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>392.7 K</b>	<b>SUPERIMPOSED DL</b>	<b>135.0 K</b>	<b>LIVE LOAD</b>	<b>56.7 K</b>
						<b>SNOW LOAD</b>	

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	2 <sup>ND</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL
					BW/GRIDS '5' & '6'	BW/GRIDS '6' & '7'	BW/GRIDS '5' & '6'	BW/GRIDS '5' & '6'	
<b>DOUBLE TEES</b>									
	TRIBUTARY WIDTH	DTW	16.50	34.50	18.00	16.50	18.00	18.00	
	TRIBUTARY LENGTH	DTL	31.25	31.25	31.25	31.25	31.25	31.25	
	TRIBUTARY AREA	DTA	515.63	1078.13	562.50	515.63	562.50	562.50	
	SELF-WT OF DT	WD1	0.083	0.083	0.080	0.083	0.080	0.080	
	DL FROM PHOTOVOLTAIC ARRAY	WD2							
	MISC. DL	WD3	0.005	0.005	0.005	0.015	0.015	0.015	
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040	0.005	0.005	0.005	
	SNOW LOAD	WL2			0.040	0.040	0.040	0.040	
	MISC. LL	WL3				0.0504	0.0504	0.0504	
	<b>TOTAL PRECAST DL</b>	DL1	42.8	89.5	45.0	42.8	45.0	45.0	265.1
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	2.6	5.4	2.8	10.3	11.3	11.3	32.3
	<b>TOTAL LL</b>	LL1	20.7	43.2	22.5	20.7	22.5	22.5	129.6
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	0.0	26.0	28.4	28.4	54.3
<b>LB-SPANDRELS</b>									
	LENGTH OF BEAMS	L SL	34.50	34.50	34.50				
	SELF-WT OF BEAM	WD1	0.81	0.81	0.81				
	MISC. DL ( Glazing)	WD2							
	MISC. LL	WL1							
	<b>TOTAL PRECAST DL</b>	DL1	28.0	28.0	28.0				84.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0				0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0				0.0
<b>WALLPANEL</b>									
	TOTAL LENGTH OF WALL	W PL							
	LENGTH OF WALL	W PL							
	HEIGHT OF WALL	W PH							
	SELF-WT OF WALL	W PD1							
	MISC. DL	W PD2							
	MISC. LL	W PL1							
	VOIDS	W PV							
	<b>TOTAL PRECAST DL</b>	DL1							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2							0.0
	<b>TOTAL LL</b>	LL1							0.0
<b>COLUMN</b>									
	LENGTH OF COLUMN	CL	29.1	29.1					
	SELF-WT OF COLUMN	WD1	1.13	1.13					
	MISC. DL	WD2							
	MISC. LL	WL1							
	<b>TOTAL PRECAST DL</b>	DL1	32.9	32.9					32.9
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0					0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0					0.0
<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>		<b>382.0 K</b>	<b>SUPERIMPOSED DL</b>	<b>32.3 K</b>	<b>LIVE LOAD</b>	<b>129.6 K</b>	<b>SNOW LOAD</b>	<b>54.3 K</b>

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL			TOTAL
<b>DOUBLE TEES</b>									
	TRIBUTARY WIDTH	DTW	16.50	16.50	16.50				
	TRIBUTARY LENGTH	DTL	31.25	31.25	31.25				
	TRIBUTARY AREA	DTA	515.63	515.63	515.63				
	SELF-WT OF DT	WD1	0.083	0.083	0.083				
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015				
	MISC. DL	WD3	0.005	0.005	0.005				
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040				
	SNOW LOAD	WL2			0.0504				
	MISC. LL	WL3							
	<b>TOTAL PRECAST DL</b>	DL1	42.8	42.8	42.8				128.4
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	2.6	2.6	10.3				15.5
	<b>TOTAL LL</b>	LL1	20.7	20.7	20.7				62.1
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	26.0				26.0
<b>LB-SPANDRELS</b>									
	LENGTH OF BEAMS	LBSL	16.50	16.50	16.50				
	SELF-WT OF BEAM	WD1	0.81	0.81	0.81				
	MISC. DL (Glazing)	WD2							
	MISC. LL	WL1							
	<b>TOTAL PRECAST DL</b>	DL1	13.4	13.4	13.4				40.2
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0				0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0				0.0
<b>WALLPANEL</b>									
	TOTAL LENGTH OF WALL	WPL							
	LENGTH OF WALL	WPL							
	HEIGHT OF WALL	WPH							
	SELF-WT OF WALL	WPD1							
	MISC. DL	WPD2							
	MISC. LL	WPL1							
	VOIDS	WPV							
	<b>TOTAL PRECAST DL</b>	DL1	0.0	0.0					0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0					0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0					0.0
<b>COLUMN</b>									
	LENGTH OF COLUMN	CL	30.15						
	SELF-WT OF COLUMN	WD1	1.13						
	MISC. DL	WD2							
	MISC. LL	WL1							
	<b>TOTAL PRECAST DL</b>	DL1	34.1						34.1
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0						0.0
	<b>TOTAL LL</b>	LL1	0.0						0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>202.7 K</b>	<b>SUPERIMPOSED DL</b>	<b>15.5 K</b>	<b>LIVE LOAD</b>	<b>62.1 K</b>	<b>SNOW LOAD</b>	<b>26.0 K</b>

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL			TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQ.FT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0
<b>SHEARWALL</b>										
	TOTAL LENGTH OF WALL	SWTL	FT.	25.17						
	LENGTH OF WALL	SWL	FT.	22.71						
	HEIGHT OF WALL	SWH	FT.	36.85						
	SELF-WT OF WALL	WD1	KSF	0.15						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	SWV	SQ.FT	72.23 Sq.ft						
	<b>TOTAL PRECAST DL</b>	DL1	K	128.3						128.3
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0
	<b>TOTAL LL</b>	LL1	K	0.0						0.0
	<b>TOTAL LOAD ON WALL</b>	<b>PRECAST DL</b>	<b>5.65 KLF</b>	<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>	<b>0.00 KLF</b>

5.58' x 10.02' + 1.92' x 4.25' x 2 No. = 72.23 sq.ft

PRODUCT	DETAILS	UNITS	GROUND LEVEL 'A' & 'B'	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL 'A' & 'B'	2 <sup>ND</sup> LEVEL B/W GRIDS 'B' & 'C'	3 <sup>RD</sup> LEVEL B/W GRIDS 'B' & 'C'	TOTAL		
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	16.50	16.50	16.50	16.50	16.50			
	TRIBUTARY LENGTH	FT.	29.25	60.50	29.25	31.25	31.25			
	TRIBUTARY AREA	DTA	482.63	998.25	482.63	515.63	515.63			
	SELF-WT OF DT	WD1	0.083	0.083	0.083	0.083	0.083			
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015	0.015	0.015			
	MISC. DL	WD3	0.005	0.005	0.005	0.005	0.005			
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040	0.040	0.040			
	SNOW LOAD	WL2			0.0504		0.0504			
	MISC. LL	WL3								
	<b>TOTAL PRECAST DL</b>	DL1	40.1	82.9	40.1	42.8	42.8	248.7		
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	2.5	5.0	9.7	2.6	10.4	30.2		
	<b>TOTAL LL</b>	LL1	19.4	40.0	19.4	20.7	20.7	120.2		
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	24.4	0.0	26.0	50.4		
<b>ITB-BEAM</b>										
	LENGTH OF BEAMS	ITBL	16.50	16.50						
	SELF-WT OF BEAM	WD1	1.06	1.06						
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	17.5	17.5				35.0		
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0				0.0		
	<b>TOTAL LL</b>	LL1	0.0	0.0				0.0		
<b>CLOSURE SPANDREL</b>										
	LENGTH OF BEAMS	ITBL			16.50					
	SELF-WT OF BEAM	WD1			1.22					
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1			20.2			20.2		
	<b>TOTAL SUPERIMPOSED DL</b>	DL2			0.0			0.0		
	<b>TOTAL LL</b>	LL1			0.0			0.0		
<b>PILASTER</b>										
	LENGTH OF PILASTER	SWPL	36.85							
	SELF-WT OF PILASTER	WD1	0.50							
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	18.4					18.4		
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0					0.0		
	<b>TOTAL LL</b>	LL1	0.0					0.0		
<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>		<b>322.3 K</b>		<b>SUPERIMPOSED DL</b>	<b>30.2 K</b>	<b>LIVE LOAD</b>	<b>120.2 K</b>	<b>SNOW LOAD</b>	<b>50.4 K</b>

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL				TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW								
	TRIBUTARY LENGTH	DTL								
	TRIBUTARY AREA	DTA								
	SELF-WT OF DT	WD1								
	DL FROM PHOTOVOLTAIC ARRAY	WD3								
	MISC. DL	WLF								
	LL (CARS / OTHERS)	WL1								
	SNOW LOAD	WL2								
	MISC. LL	WL3								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
	<b>TOTAL SNOW LOAD</b>	SL1								0.0
<b>NLB-SPANDRELS</b>										
	LENGTH OF BEAMS	NLSL								
	SELF-WT OF BEAM	WD1								
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
<b>HORZ. SPANNING WP</b>										
	TOTAL LENGTH OF WALL	WPL		3.63	3.63	3.63				
	LENGTH OF WALL	WPL		3.63	3.63	3.63				
	HEIGHT OF WALL	WPH		2.27	2.27	2.27				
	SELF-WT OF WALL	WPD1		0.15	0.15	0.15				
	MISC. DL	WPD2								
	MISC. LL	WPL1								
	VOIDS	WPV								
	<b>TOTAL PRECAST DL</b>	DL1		1.2	1.2	1.2				3.7
	<b>TOTAL SUPERIMPOSED DL</b>	DL2		0.0	0.0	0.0				0.0
	<b>TOTAL LL</b>	LL1		0.0	0.0	0.0				0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>3.7 K</b>		<b>SUPERIMPOSED DL</b>	<b>0.0 K</b>	<b>LIVE LOAD</b>	<b>0.0 K</b>	<b>SNOW LOAD</b>	<b>0.0 K</b>



PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL			TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQ.FT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0
<b>SHEARWALL</b>										
	TOTAL LENGTH OF WALL	SWTL	FT.	30.00						
	LENGTH OF WALL	SWL	FT.	30.00						
	HEIGHT OF WALL	SWH	FT.	30.67						
	SELF-WT OF WALL	WD1	KSF	0.200						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	SWV	SQ.FT	332.50 Sq.ft						
	<b>TOTAL PRECAST DL</b>	DL1	K	117.5						117.5
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0
	<b>TOTAL LL</b>	LL1	K	0.0						0.0
	<b>TOTAL LOAD ON WALL</b>	<b>PRECAST DL</b>	<b>3.92 KLF</b>		<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>

13.33' x 9.94' = 132.50 sq.ft +  
 5 No. x 40 sq.ft (From Autocad) = 200 sq.ft

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL B/W GRIDS 'A' & 'B'	2 <sup>ND</sup> LEVEL B/W GRIDS 'B' & 'C'	3 <sup>RD</sup> LEVEL B/W GRIDS 'B' & 'C'			TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	16.50	16.50	16.50	16.50	16.50			
	TRIBUTARY LENGTH	DTL	29.25	60.50	29.25	31.25	31.25			
	TRIBUTARY AREA	DTA	482.63	988.25	482.63	515.63	515.63			
	SELF-WT OF DT	W D1	0.083	0.083	0.083	0.083	0.083			
	DL FROM PHOTOVOLTAIC ARRAY	W D2								
	MISC. DL	W D3	0.005	0.005	0.005	0.005	0.005			
	LL (CARS / OTHERS)	W L1	0.040	0.040	0.040	0.040	0.040			
	SNOW LOAD	W L2			0.0504		0.0504			
	MISC. LL	W L3								
		DL1		82.9	40.1	42.8	42.8			248.7
		DL2		5.0	9.7	2.6	10.4			30.2
	<b>TOTAL PRECAST DL</b>									
	<b>TOTAL SUPERIMPOSED DL</b>									
	<b>TOTAL LL</b>	LL1	19.4	40.0	19.4	20.7	20.7			120.2
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	24.4	0.0	26.0			50.4
<b>ITB-BEAM</b>										
	LENGTH OF BEAMS	ITBL	16.50	16.50						
	SELF-WT OF BEAM	W D1	1.06	1.06						
	MISC. DL ( Glazing)	W D2								
	MISC. LL	W L1								
		DL1		17.5						35.0
		DL2		0.0						0.0
	<b>TOTAL PRECAST DL</b>	LL1	0.0	0.0						0.0
	<b>TOTAL SUPERIMPOSED DL</b>									
	<b>TOTAL LL</b>									
<b>CLOSURE SPANDREL</b>										
	LENGTH OF BEAMS	ITBL			16.50					
	SELF-WT OF BEAM	W D1			1.22					
	MISC. DL ( Glazing)	W D2								
	MISC. LL	W L1								
		DL1								20.2
		DL2			0.0					0.0
	<b>TOTAL PRECAST DL</b>	LL1			0.0					0.0
	<b>TOTAL SUPERIMPOSED DL</b>									
	<b>TOTAL LL</b>									
<b>PILASTER/COLUMN</b>										
	LENGTH OF PILASTER	SWPL		31.2			6.67			
	SELF-WT OF PILASTER	W D1	0.33				1.00			
	MISC. DL	W D2								
	MISC. LL	W L1								
		DL1								17.0
		DL2		10.3			6.7			0.0
	<b>TOTAL PRECAST DL</b>	LL1		0.0			0.0			0.0
	<b>TOTAL SUPERIMPOSED DL</b>									
	<b>TOTAL LL</b>									
	<b>TOTAL LOAD ON COLUMN</b>		<b>320.9 K</b>		<b>SUPERIMPOSED DL</b>	<b>30.2 K</b>	<b>LIVE LOAD</b>	<b>120.2 K</b>	<b>SNOW LOAD</b>	<b>50.4 K</b>

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	TOTAL			
<b>DOUBLE TEES</b>											
	TRIBUTARY WIDTH	DTW	FT.								
	TRIBUTARY LENGTH	DTL	FT.								
	TRIBUTARY AREA	DTA	SQ.FT.								
	SELF-WT OF DT	WD1	KSF								
	DL OF TOPPING	WD2	KSF								
	MISC. DL	WD3	KSF								
	LL (CARS / OTHERS)	WL1	KSF								
	SNOW LOAD	WL2	KSF								
	MISC. LL	WL3	KSF								
	<b>TOTAL PRECAST DL</b>	DL1	K					0.0			
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K					0.0			
	<b>TOTAL LL</b>	LL1	K					0.0			
	<b>TOTAL SNOW LOAD</b>	SL1	K					0.0			
<b>SHEARWALL</b>											
	TOTAL LENGTH OF WALL	SWTL	FT.	24.00							
	LENGTH OF WALL	SWL	FT.	24.00							
	HEIGHT OF WALL	SWH	FT.	31.41							
	SELF-WT OF WALL	WD1	KSF	0.200							
	MISC. DL	WD2	K								
	MISC. LL	WL1	K								
	VOIDS	SWV	SQ.FT	178.46 Sq.ft							
	<b>TOTAL PRECAST DL</b>	DL1	K	115.1				115.1			
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0				0.0			
	<b>TOTAL LL</b>	LL1	K	0.0				0.0			
<b>TOTAL LOAD ON WALL</b>				<b>PRECAST DL</b>	<b>4.80 KLF</b>	<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>

6 No x 29.75 sq.ft (From Autocad) = 178.46 sq.ft



PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL			TOTAL	
<b>DOUBLE TEES</b>											
	TRIBUTARY WIDTH	DTW	FT.								
	TRIBUTARY LENGTH	DTL	FT.								
	TRIBUTARY AREA	DTA	SQ.FT.								
	SELF-WT OF DT	WD1	KSF								
	DL OF TOPPING	WD2	KSF								
	MISC. DL	WD3	KSF								
	LL (CARS / OTHERS)	WL1	KSF								
	SNOW LOAD	WL2	KSF								
	MISC. LL	WL3	KSF								
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0	
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0	
	<b>TOTAL LL</b>	LL1	K							0.0	
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0	
<b>SHEARWALL</b>											
	TOTAL LENGTH OF WALL	SWTL	FT.	30.00							
	LENGTH OF WALL	SWL	FT.	30.00							
	HEIGHT OF WALL	SWH	FT.	31.60							
	SELF-WT OF WALL	WD1	KSF	0.200							
	MISC. DL	WD2	K								
	MISC. LL	WL1	K								
	VOIDS	SWV	SQ.FT	240.00 Sq.ft							
	<b>TOTAL PRECAST DL</b>	DL1	K	141.6						141.6	
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0	
	<b>TOTAL LL</b>	LL1	K	0.0						0.0	
<b>TOTAL LOAD ON WALL</b>				<b>PRECAST DL</b>	<b>4.72 KLF</b>	<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>

6 No. x 40 sq.ft (From Autocad) = 240 sq.ft

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL				TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	16.50	16.50	16.50					
	TRIBUTARY LENGTH	DTL	60.50	60.50	60.50					
	TRIBUTARY AREA	DTA	998.25	998.25	998.25					
	SELF-WT OF DT	WD1	0.083	0.083	0.083					
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015					
	MISC. DL	WD3	0.005	0.005	0.005					
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040					
	SNOW LOAD	WL2			0.0504					
	MISC. LL	WL3								
	<b>TOTAL PRECAST DL</b>	DL1	82.9	82.9	82.9					248.7
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	5.0	5.0	20.0					29.9
	<b>TOTAL LL</b>	LL1	40.0	40.0	40.0					120.0
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	50.3					50.3
<b>ITB-BEAM</b>										
	LENGTH OF BEAMS	ITBL	16.50	16.50	16.50					
	SELF-WT OF BEAM	WD1	1.06	1.06	1.06					
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	17.5	17.5	17.5					52.5
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0					0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0					0.0
<b>STUB COLUMN</b>										
	LENGTH OF COLUMN	CL			6.33					
	SELF-WT OF COLUMN	WD1			1.00					
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1			6.4					6.4
	<b>TOTAL SUPERIMPOSED DL</b>	DL2			0.0					0.0
	<b>TOTAL LL</b>	LL1			0.0					0.0
<b>PILASTER</b>										
	LENGTH OF PILASTER	SWPL	31.60							
	SELF-WT OF PILASTER	WD1	0.33							
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	10.4							10.4
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0							0.0
	<b>TOTAL LL</b>	LL1	0.0							0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>318.0 K</b>		<b>SUPERIMPOSED DL</b>	<b>29.9 K</b>	<b>LIVE LOAD</b>	<b>120.0 K</b>	<b>SNOW LOAD</b>	<b>50.3 K</b>

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL			TOTAL	
<b>DOUBLE TEES</b>											
	TRIBUTARY WIDTH	DTW	FT.								
	TRIBUTARY LENGTH	DTL	FT.								
	TRIBUTARY AREA	DTA	SQ.FT.								
	SELF-WT OF DT	WD1	KSF								
	DL OF TOPPING	WD2	KSF								
	MISC. DL	WD3	KSF								
	LL (CARS / OTHERS)	WL1	KSF								
	SNOW LOAD	WL2	KSF								
	MISC. LL	WL3	KSF								
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0	
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0	
	<b>TOTAL LL</b>	LL1	K							0.0	
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0	
<b>SHEARWALL</b>											
	TOTAL LENGTH OF WALL	SWTL	FT.	25.08							
	LENGTH OF WALL	SWL	FT.	22.17							
	HEIGHT OF WALL	SWH	FT.	36.81							
	SELF-WT OF WALL	WD1	KSF	0.150							
	MISC. DL	WD2	K								
	MISC. LL	WL1	K								
	VOIDS	SWV	SQ.FT	82.15 Sq.ft							
	<b>TOTAL PRECAST DL</b>	DL1	K	126.2						126.2	
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0	
	<b>TOTAL LL</b>	LL1	K	0.0						0.0	
<b>TOTAL LOAD ON WALL</b>				<b>PRECAST DL</b>	<b>5.69 KLF</b>	<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>

3 No. x 3.83' x 4.25' + 1.5 No. x 3.83' x 5.80'  
 = 82.15 sq.ft

PRODUCT	DETAILS	UNITS	GROUND LEVEL	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	LIVE LOAD	120.0 K	SNOW LOAD	TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	16.50	16.50	16.50					
	TRIBUTARY LENGTH	DTL	60.50	60.50	60.50					
	TRIBUTARY AREA	DTA	998.25	998.25	998.25					
	SELF-WT OF DT	WD1	0.083	0.083	0.083					
	DL FROM PHOTOVOLTAIC ARRAY	WD2			0.015					
	MISC. DL	WD3	0.005	0.005	0.005					
	LL (CARS / OTHERS)	WL1	0.040	0.040	0.040					
	SNOW LOAD	WL2			0.0504					
	MISC. LL	WL3								
	<b>TOTAL PRECAST DL</b>	DL1	82.9	82.9	82.9					248.7
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	5.0	5.0	20.0					29.9
	<b>TOTAL LL</b>	LL1	40.0	40.0	40.0					120.0
	<b>TOTAL SNOW LOAD</b>	SL1	0.0	0.0	50.3					50.3
<b>ITB-BEAM</b>										
	LENGTH OF BEAMS	ITBL	16.50	16.50	16.50					
	SELF-WT OF BEAM	WD1	1.06	1.06	1.06					
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	17.5	17.5	17.5					52.5
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0					0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0					0.0
<b>STUB COLUMN</b>										
	LENGTH OF COLUMN	CL								
	SELF-WT OF COLUMN	WD1								
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
<b>PILASTER</b>										
	LENGTH OF PILASTER	SWPL	36.81							
	SELF-WT OF PILASTER	WD1	0.63							
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	23.2							23.2
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0							0.0
	<b>TOTAL LL</b>	LL1	0.0							0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>324.4 K</b>		<b>SUPERIMPOSED DL</b>	<b>29.9 K</b>	<b>LIVE LOAD</b>	<b>120.0 K</b>	<b>SNOW LOAD</b>	<b>50.3 K</b>





PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>st</sup> LEVEL			2 <sup>nd</sup> LEVEL			3 <sup>rd</sup> LEVEL			PV ARRAY LOAD			TOTAL
								B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'		
DOUBLE TEES																	
	TRIBUTARY WIDTH	DTW	FT.		36.00			36.00		36.00			18.00		18.00		
	TRIBUTARY LENGTH	DTL	FT.		60.50			31.25		31.25			36.00		36.00		
	TRIBUTARY AREA	DTA	SQFT.		2178.00			1125.00		1125.00			648.00		648.00		
	SELF-WT OF DT	WD1	KSF		0.080			0.080		0.080			0.015		0.015		
	DL FROM PHOTOVOLTAIC ARRAY	WD2	KSF		0.005			0.005		0.005			0.015		0.015		
	MISC. DL	WD3	KSF		0.040			0.040		0.040			0.040		0.040		
	LL (CARS / OTHERS)	WL1	KSF		0.040			0.040		0.040			0.0504		0.0504		
	SNOW LOAD	WL2	KSF					0.0504		0.0504							
	MISC. LL	WL3	KSF														
	TOTAL PRECAST DL	DL1	K		174.3			84.3		90.0			0.0		0.0		438.6
	TOTAL SUPERIMPOSED DL	DL2	K		10.9			5.3		5.7			9.8		9.8		47.2
	TOTAL LL	LL1	K		87.2			42.2		45.0			0.0		0.0		219.4
	TOTAL SNOW LOAD	SL1	K		0.0			53.1		0.0			0.0		0.0		109.8
LB-SPANDREL																	
	LENGTH OF BEAMS	LSL	FT.														
	SELF-WT OF BEAM	WD1	KLF														
	MISC. DL ( Glazing)	WD2	KLF														
	MISC. LL	WL1	KLF														
	TOTAL PRECAST DL	DL1	K														0.0
	TOTAL SUPERIMPOSED DL	DL2	K														0.0
	TOTAL LL	LL1	K														0.0
LITEWALL																	
	TOTAL LENGTH OF WALL	TLMW	FT.		35.21												
	LENGTH OF WALL	LMW	FT.		27.21												
	HEIGHT OF WALL	HMW	FT.		35.25												
	SELF-WT OF WALL	WD1	KSF		0.175												
	MISC. DL	WD2	K														
	MISC. LL	WL1	K														
	VOIDS	LWV	SQ.FT		167.70												
	TOTAL PRECAST DL	DL1	K		187.9												187.9
	TOTAL SUPERIMPOSED DL	DL2	K		0.0												0.0
	TOTAL LL	LL1	K		0.0												0.0
	TOTAL LOAD ON WALL	PRECAST DL	23.02 KLF		SUPERIMPOSED DL	1.73 KLF		LIVE LOAD	8.06 KLF	SNOW LOAD	4.04 KLF						

6 No. x 27.95 sq.ft (From Autocad) = 167.7 sq.ft

Job : MAINE MEDICAL VISITOR PS  
 Column Grid : LW1: Existing-New DT Stern Reaction

Date : 02/12/18

FL36

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL							TOTAL
DOUBLE TEES											
	TRIBUTARY WIDTH	DTW	FT.	6.00							
	TRIBUTARY LENGTH	DTL	FT.	29.25							
	TRIBUTARY AREA	DTA	SQFT.	175.50							
	SELF-WT OF DT	WD1	KSF	0.080							
	DL FROM PHOTOVOLTALIC ARRAY	WD2	KSF								
	MISC. DL	WD3	KSF	0.005							
	LL (CARS / OTHERS)	WL1	KSF	0.040							
	SNOW LOAD	WL2	KSF								
	MISC. LL	WL3	KSF								
	TOTAL PRECAST DL	DL1	K	14.1							14.1
	TOTAL SUPERIMPOSED DL	DL2	K	0.9							0.9
	TOTAL LL	LL1	K	7.1							7.1
	TOTAL SNOW LOAD	SL1	K	0.0							0.0

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	PV ARRAY LOAD				TOTAL	
					1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL	2 <sup>nd</sup> LEVEL 'A' & 'B'		3 <sup>rd</sup> LEVEL 'B' & 'C'
DOUBLE TEES	TRIBUTARY WIDTH	DTW	FT.	36.00	B/W GRIDS 'A' & 'B'	36.00	B/W GRIDS 'B' & 'C'	18.00	18.00	
	TRIBUTARY LENGTH	DTL	FT.	60.50	31.25	31.25	36.00	36.00	36.00	
	TRIBUTARY AREA	DTA	SQFT.	2178.00	1053.00	1125.00	1125.00	648.00	648.00	
	SELF-WT OF DT	WD1	KSF	0.080	0.080	0.080	0.080	0.015	0.015	
	DL FROM PHOTOVOLTAIC ARRAY	WD2	KSF	0.005	0.005	0.005	0.005	0.040	0.040	
	MISC. DL	WD3	KSF	0.040	0.040	0.040	0.040	0.0504	0.0504	
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	TOTAL PRECAST DL	DL1	K		174.3	84.3	90.0	90.0	0.0	0.0
TOTAL SUPERIMPOSED DL	DL2	K		10.9	5.3	5.7	5.7	9.8	9.8	47.2
TOTAL LL	LL1	K		87.2	42.2	45.0	45.0	0.0	0.0	219.4
TOTAL SNOW LOAD	SL1	K		0.0	53.1	0.0	56.7	0.0	0.0	109.8
LB-SPANDREL										
LENGTH OF BEAMS	LSL	FT.								
SELF-WT OF BEAM	WD1	KLF								
MISC. DL ( Glazing)	WD2	KLF								
MISC. LL	WL1	KLF								
TOTAL PRECAST DL	DL1	K								0.0
TOTAL SUPERIMPOSED DL	DL2	K								0.0
TOTAL LL	LL1	K								0.0
LITEWALL										
TOTAL LENGTH OF WALL	TLMW	FT.		35.21						
LENGTH OF WALL	LMW	FT.		27.21						
HEIGHT OF WALL	HMW	FT.		32.75						
SELF-WT OF WALL	WD1	KSF		0.175						
MISC. DL	WD2	K								
MISC. LL	WL1	K								
VOIDS	LWV	SQ.FT		167.70 Sq.ft						
TOTAL PRECAST DL	DL1	K		172.4						172.4
TOTAL SUPERIMPOSED DL	DL2	K		0.0						0.0
TOTAL LL	LL1	K		0.0						0.0
TOTAL LOAD ON WALL	PRECAST DL	22.45 KLF		SUPERIMPOSED DL	1.73 KLF	LIVE LOAD	8.06 KLF	SNOW LOAD	4.04 KLF	

6 No. x 27.95 sq.ft (From Autocad) = 167.7 sq.ft

Job : MAINE MEDICAL VISITOR PS  
 Column Grid : LW2: Existing-New DT Stern Reaction

Date : 02/12/18

FL38

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL							TOTAL
DOUBLE TEES											
	TRIBUTARY WIDTH	DTW	FT.	6.00							
	TRIBUTARY LENGTH	DTL	FT.	29.25							
	TRIBUTARY AREA	DTA	SQFT.	175.50							
	SELF-WT OF DT	WD1	KSF	0.080							
	DL FROM PHOTOVOLTALIC ARRAY	WD2	KSF								
	MISC. DL	WD3	KSF	0.005							
	LL (CARS / OTHERS)	WL1	KSF	0.040							
	SNOW LOAD	WL2	KSF								
	MISC. LL	WL3	KSF								
	TOTAL PRECAST DL	DL1	K	14.1							14.1
	TOTAL SUPERIMPOSED DL	DL2	K	0.9							0.9
	TOTAL LL	LL1	K	7.1							7.1
	TOTAL SNOW LOAD	SL1	K	0.0							0.0

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL	1 <sup>st</sup> LEVEL			2 <sup>nd</sup> LEVEL			3 <sup>rd</sup> LEVEL			PV ARRAY LOAD			TOTAL
					B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'	B/W GRIDS 'A' & 'B'	B/W GRIDS 'B' & 'C'			
DOUBLE TEES																	
	TRIBUTARY WIDTH	DTW	FT.	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	18.00	18.00	18.00		
	TRIBUTARY LENGTH	DTL	FT.	29.25	60.50	31.25	31.25	31.25	36.00	36.00	36.00	36.00	36.00	36.00	36.00		
	TRIBUTARY AREA	DTA	SQ.FT.	1053.00	2178.00	1125.00	1125.00	1125.00	648.00	648.00	648.00	648.00	648.00	648.00	648.00		
	SELF-WT OF DT	WD1	KSF	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.015	0.015	0.015		
	DL FROM PHOTOVOLTAIC ARRAY	WD2	KSF	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.015	0.015	0.015		
	MISC. DL	WD3	KSF	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040		
	LL (CARS / OTHERS)	WL1	KSF														
	SNOW LOAD	WL2	KSF														
	MISC. LL	WL3	KSF														
	TOTAL PRECAST DL	DL1	K	84.3	174.3	84.3	84.3	90.0	90.0	90.0	90.0	90.0	0.0	0.0	0.0		522.9
	TOTAL SUPERIMPOSED DL	DL2	K	5.3	10.9	5.3	5.3	5.7	5.7	5.7	5.7	5.7	9.8	9.8	9.8		52.5
	TOTAL LL	LL1	K	42.2	87.2	42.2	42.2	45.0	45.0	45.0	45.0	45.0	0.0	0.0	0.0		261.6
	TOTAL SNOW LOAD	SL1	K	0.0	0.0	53.1	53.1	0.0	56.7	56.7	56.7	56.7	0.0	0.0	0.0		109.8
LB-SPANDREL																	
	LENGTH OF BEAMS	LSL	FT.														
	SELF-WT OF BEAM	WD1	KLF														
	MISC. DL ( Glazing)	WD2	KLF														
	MISC. LL	WL1	KLF														
	TOTAL PRECAST DL	DL1	K														0.0
	TOTAL SUPERIMPOSED DL	DL2	K														0.0
	TOTAL LL	LL1	K														0.0
LITEWALL																	
	TOTAL LENGTH OF WALL	TLMW	FT.	35.21													
	LENGTH OF WALL	LMW	FT.	27.21													
	HEIGHT OF WALL	HMW	FT.	35.25													
	SELF-WT OF WALL	WD1	KSF	0.175													
	MISC. DL	WD2	K														
	MISC. LL	WL1	K														
	VOIDS	LWV	SQ.FT	167.70	Sq.ft												
	TOTAL PRECAST DL	DL1	K	187.9													187.9
	TOTAL SUPERIMPOSED DL	DL2	K	0.0													0.0
	TOTAL LL	LL1	K	0.0													0.0
	TOTAL LOAD ON WALL	PRECASST DL	26.12 KLF														
		PRECASST DL	26.12 KLF														
		SUPERIMPOSED DL	1.93 KLF														
		LIVE LOAD	9.61 KLF														
		SNOW LOAD	4.04 KLF														

6 No. x 27.95 sq.ft (From Autocad) = 167.7 sq.ft

PRODUCT	DETAILS	VARIABLE	UNITS	GROUND LEVEL			1 <sup>st</sup> LEVEL			2 <sup>nd</sup> LEVEL			3 <sup>rd</sup> LEVEL			PV ARRAY LOAD			TOTAL	
				B/W GRIDS 'A' & 'B'			B/W GRIDS 'A' & 'B'			B/W GRIDS 'B' & 'C'			B/W GRIDS 'A' & 'B'			B/W GRIDS 'B' & 'C'				B/W GRIDS 'B' & 'C'
DOUBLE TEES																				
	TRIBUTARY WIDTH	DTW	FT.	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	18.00	18.00	18.00				
	TRIBUTARY LENGTH	DTL	FT.	29.25	60.50	31.25	31.25	31.25	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00				
	TRIBUTARY AREA	DTA	SQFT.	1053.00	2178.00	1125.00	1125.00	1125.00	1125.00	1125.00	1125.00	1125.00	648.00	648.00	648.00	648.00				
	SELF-WT OF DT	WD1	KSF	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.015	0.015	0.015					
	DL FROM PHOTOVOLTAIC ARRAY	WD2	KSF	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.015	0.015	0.015					
	MISC. DL	WD3	KSF	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040					
	LL (CARS / OTHERS)	WL1	KSF																	
	SNOW LOAD	WL2	KSF																	
	MISC. LL	WL3	KSF																	
	TOTAL PRECAST DL	DL1	K	84.3	174.3	84.3	84.3	90.0	90.0	90.0	90.0	90.0	0.0	0.0	0.0					522.9
	TOTAL SUPERIMPOSED DL	DL2	K	5.3	10.9	5.3	5.3	5.7	5.7	5.7	5.7	5.7	9.8	9.8	9.8					52.5
	TOTAL LL	LL1	K	42.2	87.2	42.2	42.2	45.0	45.0	45.0	45.0	45.0	0.0	0.0	0.0					261.6
	TOTAL SNOW LOAD	SL1	K	0.0	0.0	53.1	53.1	0.0	56.7	56.7	56.7	56.7	0.0	0.0	0.0					109.8
LB-SPANDREL																				
	LENGTH OF BEAMS	LSL	FT.																	
	SELF-WT OF BEAM	WD1	KLF																	
	MISC. DL ( Glazing)	WD2	KLF																	
	MISC. LL	WL1	KLF																	
	TOTAL PRECAST DL	DL1	K																	0.0
	TOTAL SUPERIMPOSED DL	DL2	K																	0.0
	TOTAL LL	LL1	K																	0.0
LITEWALL																				
	TOTAL LENGTH OF WALL	TLMW	FT.	35.21																
	LENGTH OF WALL	LMW	FT.	27.21																
	HEIGHT OF WALL	HMW	FT.	32.75																
	SELF-WT OF WALL	WD1	KSF	0.175																
	MISC. DL	WD2	K																	
	MISC. LL	WL1	K																	
	VOIDS	LWV	SQ.FT	167.70	Sq.ft															
	TOTAL PRECAST DL	DL1	K	172.4																172.4
	TOTAL SUPERIMPOSED DL	DL2	K	0.0																0.0
	TOTAL LL	LL1	K	0.0																0.0
	TOTAL LOAD ON WALL	PRECASD DL	25.55 KLF																	
		PRECASD DL	25.55 KLF																	
		SUPERIMPOSED DL	1.93 KLF																	
		LIVE LOAD	9.61 KLF																	
		SNOW LOAD	4.04 KLF																	

6 No. x 27.95 sq.ft (From Autocad) = 167.7 sq.ft

PRODUCT	DETAILS	VARIABLE	UNITS	1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL				TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQFT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0
<b>NLB-SPANDREL</b>										
	LENGTH OF BEAMS	LSL	FT.							
	SELF-WT OF BEAM	WD1	KLF							
	MISC. DL ( Glazing)	WD2	KLF							
	MISC. LL	WL1	KLF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
<b>WALLPANEL</b>										
	TOTAL LENGTH OF WALL	TLMW	FT.	8.92						
	LENGTH OF WALL	LMW	FT.	4.08						
	HEIGHT OF WALL	HMW	FT.	29.94						
	SELF-WT OF WALL	WD1	KSF	0.15						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	WPV	SQ.FT	45.04						
	<b>TOTAL PRECAST DL</b>	DL1	K	33.3						33.3
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0
	<b>TOTAL LL</b>	LL1	K	0.0						0.0
	<b>TOTAL LOAD ON WALL</b>	<b>PRECAST DL</b>	<b>8.16 KLF</b>		<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>

2 No. x 3.83' x 4.33' = 33.17 sq.ft  
 3.83' x 3.10' = 11.87 sq.ft



PRODUCT	DETAILS	UNITS	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	LIVE LOAD	SNOW LOAD	TOTAL
<b>DOUBLE TEES</b>								
	TRIBUTARY WIDTH	DTW						
	TRIBUTARY LENGTH	DTL						
	TRIBUTARY AREA	DTA						
	SELF-WT OF DT	WD1						
	DL FROM PHOTOVOLTAIC ARRAY	WD2						
	MISC. DL	WD3						
	LL (CARS / OTHERS)	WL1						
	SNOW LOAD	WL2						
	MISC. LL	WL3						
	<b>TOTAL PRECAST DL</b>	DL1						0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2						0.0
	<b>TOTAL LL</b>	LL1						0.0
	<b>TOTAL SNOW LOAD</b>	SL1						0.0
<b>NLB-SPANDREL</b>								
	LENGTH OF BEAMS	ITBL	17.17	17.17	17.17			
	SELF-WT OF BEAM	WD1	0.85	0.85	0.85			
	MISC. DL ( Glazing)	WD2						
	MISC. LL	WL1						
	<b>TOTAL PRECAST DL</b>	DL1	14.6	14.6	14.6			43.8
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0			0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0			0.0
<b>STUB COLUMN</b>								
	LENGTH OF COLUMN	CL						
	SELF-WT OF COLUMN	WD1						
	MISC. DL	WD2						
	MISC. LL	WL1						
	<b>TOTAL PRECAST DL</b>	DL1						0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2						0.0
	<b>TOTAL LL</b>	LL1						0.0
<b>PILASTER</b>								
	LENGTH OF PILASTER	SWPL						
	SELF-WT OF PILASTER	WD1						
	MISC. DL	WD2						
	MISC. LL	WL1						
	<b>TOTAL PRECAST DL</b>	DL1						0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2						0.0
	<b>TOTAL LL</b>	LL1						0.0
<b>TOTAL LOAD ON COLUMN</b>			43.8 K	0.0 K	0.0 K	0.0 K	0.0 K	0.0 K

PRODUCT	DETAILS	VARIABLE	UNITS	1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL				TOTAL
DOUBLE TEES	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQFT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	TOTAL PRECAST DL	DL1	K							0.0
	TOTAL SUPERIMPOSED DL	DL2	K							0.0
	TOTAL LL	LL1	K							0.0
TOTAL SNOW LOAD	SL1	K							0.0	
NLB-SPANDREL	LENGTH OF BEAMS	LSL	FT.	17.17	17.17	17.17				
	SELF-WT OF BEAM	WD1	KLF	0.85	0.85	0.85				
	MISC. DL ( Glazing)	WD2	KLF							
	MISC. LL	WL1	KLF							
	TOTAL PRECAST DL	DL1	K	14.6	14.6	14.6				43.8
	TOTAL SUPERIMPOSED DL	DL2	K	0.0	0.0	0.0				0.0
	TOTAL LL	LL1	K	0.0	0.0	0.0				0.0
	TOTAL LENGTH OF WALL	SWTL	FT.	4.75						
	LENGTH OF WALL	SWL	FT.	2.83						
	HEIGHT OF WALL	SWH	FT.	26.75						
	SELF-WT OF WALL	WD1	KSF	0.150						
	MISC. DL	WD2	K							
MISC. LL	WL1	K								
VOIDS	SWV	SQ.FT	16.28 Sq.ft							
TOTAL PRECAST DL	DL1	K	16.6						16.6	
TOTAL SUPERIMPOSED DL	DL2	K	0.0						0.0	
TOTAL LL	LL1	K	0.0						0.0	
WALLPANEL	TOTAL LENGTH OF WALL	TLMW	FT.	2.83						
	LENGTH OF WALL	LMW	FT.	2.83						
	HEIGHT OF WALL	HMW	FT.	5.02						
	SELF-WT OF WALL	WD1	KSF	0.15						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	WPV	SQ.FT							
	TOTAL PRECAST DL	DL1	K	2.1						2.1
	TOTAL SUPERIMPOSED DL	DL2	K	0.0						0.0
	TOTAL LL	LL1	K	0.0						0.0
	TOTAL LOAD ON WALL	PRECAST DL	22.08 KLF							
		SUPERIMPOSED DL	0.00 KLF							
	LIVE LOAD	0.00 KLF								
	SNOW LOAD	0.00 KLF								

2 No x (3.83/2) x 4.25' = 16.28 sq.ft

PRODUCT	DETAILS	VARIABLE	UNITS	1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL				TOTAL
DOUBLE TEES										
	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQFT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	TOTAL PRECAST DL	DL1	K							0.0
	TOTAL SUPERIMPOSED DL	DL2	K							0.0
	TOTAL LL	LL1	K							0.0
	TOTAL SNOW LOAD	SL1	K							0.0
NLB-SPANDREL										
	LENGTH OF BEAMS	LSL	FT.							
	SELF-WT OF BEAM	WD1	KLF							
	MISC. DL ( Glazing)	WD2	KLF							
	MISC. LL	WL1	KLF							
	TOTAL PRECAST DL	DL1	K							0.0
	TOTAL SUPERIMPOSED DL	DL2	K							0.0
	TOTAL LL	LL1	K							0.0
WALLPANEL										
	TOTAL LENGTH OF WALL	TLMW	FT.	30.10						
	LENGTH OF WALL	LMW	FT.	23.15						
	HEIGHT OF WALL	HMW	FT.	32.08						
	SELF-WT OF WALL	WD1	KSF	0.15						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	WPV	SQ.FT	108.40						
	TOTAL PRECAST DL	DL1	K	128.6						128.6
	TOTAL SUPERIMPOSED DL	DL2	K	0.0						0.0
	TOTAL LL	LL1	K	0.0						0.0
	TOTAL LOAD ON WALL	PRECAST DL	5.56 KLF		SUPERIMPOSED DL	0.00 KLF	LIVE LOAD	0.00 KLF	SNOW LOAD	0.00 KLF

3.33' x 4.0' = 13.32 sq.ft  
 2 No. x 6.96' x 4.33' = 60.27 sq.ft  
 6.96' x 5.0' = 34.8 sq.ft

PRODUCT	DETAILS	UNITS	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL					TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW								
	TRIBUTARY LENGTH	DTL								
	TRIBUTARY AREA	DTA								
	SELF-WT OF DT	WD1								
	DL FROM PHOTOVOLTAIC ARRAY	WD2								
	MISC. DL	WD3								
	LL (CARS / OTHERS)	WL1								
	SNOW LOAD	WL2								
	MISC. LL	WL3								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
	<b>TOTAL SNOW LOAD</b>	SL1								0.0
<b>NLB-SPANDRELS</b>										
	LENGTH OF BEAMS	NLBSL								
	SELF-WT OF BEAM	WD1								
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
<b>HORZ. SPANNING WP</b>										
	TOTAL LENGTH OF WALL	WPL	3.63	3.63	3.63					
	LENGTH OF WALL	WPL	3.63	3.63	3.63					
	HEIGHT OF WALL	WPH	2.27	2.27	2.27					
	SELF-WT OF WALL	WPD1	0.15	0.15	0.15					
	MISC. DL	WPD2								
	MISC. LL	WPL1								
	VOIDS	WPV								
	<b>TOTAL PRECAST DL</b>	DL1	1.2	1.2	1.2					3.7
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0					0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0					0.0
	<b>TOTAL LOAD ON COLUMN</b>	<b>PRECAST DL</b>	<b>3.7 K</b>		<b>SUPERIMPOSED DL</b>	<b>0.0 K</b>	<b>LIVE LOAD</b>	<b>0.0 K</b>	<b>SNOW LOAD</b>	<b>0.0 K</b>

PRODUCT	DETAILS	VARIABLE	UNITS	1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL				TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQFT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0
<b>NLB-SPANDREL</b>										
	LENGTH OF BEAMS	LSL	FT.							
	SELF-WT OF BEAM	WD1	KLF							
	MISC. DL ( Glazing)	WD2	KLF							
	MISC. LL	WL1	KLF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
<b>WALLPANEL</b>										
	TOTAL LENGTH OF WALL	TLMW	FT.	8.94						
	LENGTH OF WALL	LMW	FT.	5.10						
	HEIGHT OF WALL	HMW	FT.	32.08						
	SELF-WT OF WALL	WD1	KSF	0.15						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	WPV	SQ.FT	52.62						
	<b>TOTAL PRECAST DL</b>	DL1	K	35.1						35.1
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0
	<b>TOTAL LL</b>	LL1	K	0.0						0.0
	<b>TOTAL LOAD ON WALL</b>	<b>PRECAST DL</b>	<b>6.88 KLF</b>		<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>

2 No. x 3.83' x 4.33' = 33.17 sq.ft  
 3.83' x 5.08' = 19.45 sq.ft



PRODUCT	DETAILS	UNITS	1 <sup>ST</sup> LEVEL	2 <sup>ND</sup> LEVEL	3 <sup>RD</sup> LEVEL	LIVE LOAD	0.0 K	0.0 K	SNOW LOAD	TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW								
	TRIBUTARY LENGTH	DTL								
	TRIBUTARY AREA	DTA								
	SELF-WT OF DT	WD1								
	DL FROM PHOTOVOLTAIC ARRAY	WD2								
	MISC. DL	WD3								
	LL (CARS / OTHERS)	WL1								
	SNOW LOAD	WL2								
	MISC. LL	WL3								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
	<b>TOTAL SNOW LOAD</b>	SL1								0.0
<b>NLB-SPANDREL</b>										
	LENGTH OF BEAMS	ITBL	17.88	17.88	17.88					
	SELF-WT OF BEAM	WD1	0.85	0.85	0.85					
	MISC. DL ( Glazing)	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1	15.2	15.2	15.2					45.6
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	0.0	0.0	0.0					0.0
	<b>TOTAL LL</b>	LL1	0.0	0.0	0.0					0.0
<b>STUB COLUMN</b>										
	LENGTH OF COLUMN	CL								
	SELF-WT OF COLUMN	WD1								
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
<b>PILASTER</b>										
	LENGTH OF PILASTER	SWPL								
	SELF-WT OF PILASTER	WD1								
	MISC. DL	WD2								
	MISC. LL	WL1								
	<b>TOTAL PRECAST DL</b>	DL1								0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2								0.0
	<b>TOTAL LL</b>	LL1								0.0
<b>TOTAL LOAD ON COLUMN</b>			45.6 K	0.0 K	0.0 K					0.0 K

PRODUCT	DETAILS	VARIABLE	UNITS	1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL	TOTAL	
DOUBLE TEES	TRIBUTARY WIDTH	DTW	FT.					
	TRIBUTARY LENGTH	DTL	FT.					
	TRIBUTARY AREA	DTA	SQFT.					
	SELF-WT OF DT	WD1	KSF					
	DL OF TOPPING	WD2	KSF					
	MISC. DL	WD3	KSF					
	LL (CARS / OTHERS)	WL1	KSF					
	SNOW LOAD	WL2	KSF					
	MISC. LL	WL3	KSF					
	TOTAL PRECAST DL	DL1	K				0.0	
	TOTAL SUPERIMPOSED DL	DL2	K				0.0	
	TOTAL LL	LL1	K				0.0	
	TOTAL SNOW LOAD	SL1	K				0.0	
	NLB-SPANDREL	LENGTH OF BEAMS	LSL	FT.				
SELF-WT OF BEAM		WD1	KLF					
MISC. DL ( Glazing)		WD2	KLF					
MISC. LL		WL1	KLF					
TOTAL PRECAST DL		DL1	K				0.0	
TOTAL SUPERIMPOSED DL		DL2	K				0.0	
TOTAL LL		LL1	K				0.0	
WALLPANEL		TOTAL LENGTH OF WALL	TLMW	FT.	21.92			
		LENGTH OF WALL	LMW	FT.	17.92			
		HEIGHT OF WALL	HMW	FT.	29.92			
		SELF-WT OF WALL	WD1	KSF	0.15			
		MISC. DL	WD2	K				
		MISC. LL	WL1	K				
		VOIDS	WPV	SQ.FT	92.44 Sq.ft			
	TOTAL PRECAST DL	DL1	K	84.5			84.5	
	TOTAL SUPERIMPOSED DL	DL2	K	0.0			0.0	
	TOTAL LL	LL1	K	0.0			0.0	
	TOTAL LOAD ON WALL	PRECAST DL	4.72 KLF					
		SUPERIMPOSED DL	0.00 KLF					
		LIVE LOAD	0.00 KLF					
		SNOW LOAD	0.00 KLF					

4.0' x 4.27' = 17.08 sq.ft  
 2 No. x 4.0' x 7.73' = 61.84 sq.ft  
 4.0' x 3.38' = 13.52 sq.ft



PRODUCT	DETAILS	VARIABLE	UNITS	1 <sup>st</sup> LEVEL	2 <sup>nd</sup> LEVEL	3 <sup>rd</sup> LEVEL				TOTAL
<b>DOUBLE TEES</b>										
	TRIBUTARY WIDTH	DTW	FT.							
	TRIBUTARY LENGTH	DTL	FT.							
	TRIBUTARY AREA	DTA	SQFT.							
	SELF-WT OF DT	WD1	KSF							
	DL OF TOPPING	WD2	KSF							
	MISC. DL	WD3	KSF							
	LL (CARS / OTHERS)	WL1	KSF							
	SNOW LOAD	WL2	KSF							
	MISC. LL	WL3	KSF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
	<b>TOTAL SNOW LOAD</b>	SL1	K							0.0
<b>NLB-SPANDREL</b>										
	LENGTH OF BEAMS	LSL	FT.							
	SELF-WT OF BEAM	WD1	KLF							
	MISC. DL ( Glazing)	WD2	KLF							
	MISC. LL	WL1	KLF							
	<b>TOTAL PRECAST DL</b>	DL1	K							0.0
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K							0.0
	<b>TOTAL LL</b>	LL1	K							0.0
<b>WALLPANEL</b>										
	TOTAL LENGTH OF WALL	TLMW	FT.	12.82						
	LENGTH OF WALL	LMW	FT.	12.82						
	HEIGHT OF WALL	HMW	FT.	29.92						
	SELF-WT OF WALL	WD1	KSF	0.15						
	MISC. DL	WD2	K							
	MISC. LL	WL1	K							
	VOIDS	WPV	SQ.FT							
	<b>TOTAL PRECAST DL</b>	DL1	K	57.5						57.5
	<b>TOTAL SUPERIMPOSED DL</b>	DL2	K	0.0						0.0
	<b>TOTAL LL</b>	LL1	K	0.0						0.0
	<b>TOTAL LOAD ON WALL</b>	<b>PRECAST DL</b>	<b>4.49 KLF</b>		<b>SUPERIMPOSED DL</b>	<b>0.00 KLF</b>	<b>LIVE LOAD</b>	<b>0.00 KLF</b>	<b>SNOW LOAD</b>	<b>0.00 KLF</b>