

Main Frame Reactions of Lines: 2,3,5,6 (BLDG-A)					Main Frame Reactions of Lines: 4 (BLDG-A)					Main Frame Reactions of Lines: D.1 & E (BLDGS C & D)				
NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.					NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.					NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
Condition	Grid	Ver	Hor	Mom	Condition	Grid	Ver	Hor	Mom	Condition	Grid	Ver	Hor	Mom
DEAD LOAD	D	11.0690	1.3510	0.0000	DEAD LOAD	D	18.6150	1.4140	0.0000	DEAD LOAD	2/5	0.9840	0.1010	0.0000
DEAD LOAD	A	8.8000	-1.3510	0.0000	DEAD LOAD	A	13.7540	-1.4140	0.0000	DEAD LOAD	3/6	0.9840	-1.5370	0.0000
CL	D	1.6520	0.8650	0.0000	CL	D	1.6520	0.8650	0.0000	DL+LL	2/5	5.2970	0.6250	0.0000
CL	A	2.0570	-0.8650	0.0000	CL	A	2.0570	-0.8650	0.0000	DL+LL	3/6	5.2970	-0.6250	0.0000
DL+CL+LL	D	22.6300	7.4050	0.0000	DL+CL+LL	D	30.1760	7.4670	0.0000	0.6DL+WLL	2/5	-1.7770	-1.7120	0.0000
DL+CL+LL	A	23.1960	-7.4050	0.0000	DL+CL+LL	A	28.1510	-7.4670	0.0000	0.6DL+WLL	3/6	-0.4570	-1.5370	0.0000
0.6DL+WLL	D	-5.7320	-7.0740	0.0000	0.6DL+WLL	D	-1.2040	-7.0370	0.0000	0.6DL+WLR	2/5	-0.4570	1.5370	0.0000
0.6DL+WLL	A	-6.7420	0.7950	0.0000	0.6DL+WLL	A	-3.7700	0.7580	0.0000	0.6DL+WLR	3/6	-1.7770	1.7120	0.0000
0.6DL+WLR	D	-2.9550	-0.8000	0.0000	0.6DL+WLR	D	1.5720	-7.0200	0.0000	0.6DL+W2	2/5	-0.6510	-2.2010	0.0000
0.6DL+WLR	A	-10.3470	7.0780	0.0000	0.6DL+WLR	A	-7.3740	7.0410	0.0000	0.6DL+W2	3/6	0.6690	-1.6470	0.0000
0.6DL+W2	D	-0.5270	-6.2980	0.0000	0.6DL+W2	D	4.0000	-6.2600	0.0000	0.6DL+WR2	2/5	0.6690	1.0470	0.0000
0.6DL+W2	A	-0.1940	0.0230	0.0000	0.6DL+W2	A	2.7790	-0.0150	0.0000	0.6DL+WR2	3/6	-0.6510	2.2010	0.0000
0.6DL+WR2	D	2.2480	-0.0270	0.0000	0.6DL+WR2	D	6.7760	0.0100	0.0000	Main Frame Reactions of Lines: A & D (PORTAL)				
0.6DL+WR2	A	-3.7970	6.3020	0.0000	0.6DL+WR2	A	-0.8250	6.2840	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+LLF	D	26.6990	2.3460	0.0000	DL+CL+LLF	D	51.3360	2.5350	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+LLF	A	20.8780	-2.3460	0.0000	DL+CL+LLF	A	35.7420	-2.5350	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LL+LLF)	D	32.1370	6.2050	0.0000	DL+CL+0.75(LL+LLF)	D	51.0000	6.3620	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LL+LLF)	A	27.6280	-5.2050	0.0000	DL+CL+0.75(LL+LLF)	A	40.0140	-6.3620	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+WLL)	D	15.4250	-3.6000	0.0000	DL+CL+0.75(LLF+WLL)	D	34.2880	-3.4430	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+WLL)	A	9.3560	-1.1090	0.0000	DL+CL+0.75(LLF+WLL)	A	21.7420	-1.2660	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+WLR)	D	17.5070	1.1060	0.0000	DL+CL+0.75(LLF+WLR)	D	36.3710	1.2630	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+WLR)	A	6.6530	3.6030	0.0000	DL+CL+0.75(LLF+WLR)	A	19.0390	3.4460	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+W2)	D	19.3280	-3.0180	0.0000	DL+CL+0.75(LLF+W2)	D	38.1920	-2.8610	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+W2)	A	14.2880	-1.8880	0.0000	DL+CL+0.75(LLF+W2)	A	26.8540	-1.8450	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+WR2)	D	21.4100	1.6850	0.0000	DL+CL+0.75(LLF+WR2)	D	40.2730	1.8420	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				
DL+CL+0.75(LLF+WR2)	A	11.3650	3.0210	0.0000	DL+CL+0.75(LLF+WR2)	A	23.9510	2.8640	0.0000	NOTE: All reactions are shown in Kips. A negative value, indicates opposite direction.				

ENDWALL BRACING REACTIONS (KIP)			
BRACING REACTION AT COL LINES "1" & "7"			
WIND	H	V	
	3.6	6.7	

ID	SIZE	ENDWALL COLUMN REACTIONS (kip)			
		DL+CL+LL	0.6DL+WLL	WL	MEZZ.
CC-1	WBK18	4.8	4.9	2.3	11.0
EC-2	WBK24	4.0	3.7	4.6	25.0

DL + LL = 4.6 k (V) ↑  
 0.6DL + WL = 3.4 k (V) ↓  
 WL = 0.1 k (H) →

LEAN-TO COLUMN REACTIONS • COL. LINE ".5A"  
 BLDG. "B"

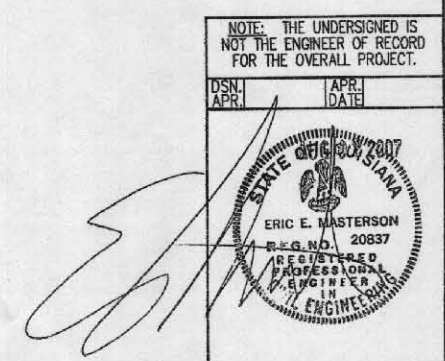
SEE ANCHOR BOLT SETTING PLAN FOR COLUMN ORIENTATION

DRAWING STATUS	
<input type="checkbox"/>	FOR APPROVAL: THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT DOCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.
<input type="checkbox"/>	FOR PERMIT: THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL IN THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.
<input checked="" type="checkbox"/>	FOR CONSTRUCTION: FINAL DRAWINGS.

REVISIONS			
NO.	DATE	DESCRIPTION	BY
0	8/2/07	FOR CONSTRUCTION	TN RVS

**SBS** SCHULTE BUILDING SYSTEMS  
 17600 Badtke Road • Hockley, Texas 77447  
 PHONE: 281.304.6111 877.257.2534  
 FAX: 281.304.6113  
 www.SchulteBuildingSystems.com

DESCRIPTION: BASE PLATES & REACTIONS  
 SIZE: SEE BUILDING DESCRIPTION SHEET C1  
 CUSTOMER: R & S METAL BUILDERS INC. PROJECT: BENS FORD BAPTIST CHURCH  
 LOCATION: BOGALUSA, LA 70427  
 DRN. BY: CK'D BY: DATE: SCALE: NONE JOB NO. 22693 PH. BLDG. DESC. (REV) SHEET NO. F2 of 2 ISSUE 0



1

FOUNDATION CHECK  
FROM BLDG. MANUFACTURER

MTC BLDG INFO

END COL'S VERTICAL GRID

MAX DL+LL = 5.29 KIPS 2/5'

MAX UPLIFT = .6 DL+WL = -1.78 KIPS 2/5'

END COL'S HORIZONTAL

MAX .6 DL+WLR = 2.2 KIPS 3/5'

.6 DL+WLR = -2.2 KIPS 2/5'

COL'S # 2, 3, 5, 6

VERTICAL

MAX DL+CL+.75(LL+LLF) = 32.13 KIPS D

MAX UPLIFT .6 DL+WLR = -10.347 KIPS A

HORIZONTAL

DL+CL+LL = 7.4 KIPS D

DL+CL+LL = -7.4 KIPS A

CENTER COL #4

VERTICAL

MAX DL+CL+.75(LLF+WLR) = 40.27 KIPS D

MAX UPLIFT .6 DL+WLR = -7.37 KIPS A

HORIZONTAL

DL+CL+LL = 7.47 KIPS D

DL+CL+LL = -7.47 KIPS A

PORTAL (PARCE COCHERE)

DL+.75(LLF+WLR) = 17.97 KIPS 3/6

UPLIFT .6 DL+WLR = -3.0 KIPS 3/6

HORIZONTAL

.6 DL+WLR = 2.65 KIPS 3/6

DL+.75(LLF+WLR) = -1.976 KIPS 3/6

2

# Check Foundation against Bldg loads & WIND LOADS

## 1. END COL'S

$$\text{VERT} = +5.29 \text{ KIPS} \quad \text{HOR} = -2.2010 \text{ KIPS}$$

$$\text{UPLIFT} = 1.78 \text{ KIPS}$$

$$\text{LOAD } (15 \times 10 \times .41 \times 4 \times 4 \times 1.5) 150 \text{#/FT}^3 = 3.6 \text{ KIPS}$$

$$3 \text{ KIPS} + 5.29 \text{ KIPS} = 8.89 \text{ KIPS}$$

$$\frac{8.89}{15 \times 10 \text{ SF}} = .06 \text{ KIPS/SF} = 600 \text{ LBS/SF} = \text{OK}$$

$$\text{UPLIFT} = 1.78 \text{ KIPS}$$

$$\text{WT OF SLAB (ATT AREA)} = 3.6 \text{ KIPS}$$

$$3.6 > 1.78 \quad \therefore \text{OK}$$

$$\text{HOR. } -2.2 \text{ KIPS} < 3.6 \text{ KIPS} \quad \therefore \text{OK}$$

## 2. INTERMEDIATE COL'S ROWS 2, 3, 5, 6,

$$\text{VERT} = +32.13 \text{ KIPS} \quad \text{HOR} = 7.4 \text{ KIPS}$$

$$\text{UPLIFT} = 10.347 \text{ KIPS}$$

$$\text{LOAD } (15 \times 19 \times .41 \times 4 \times 4 \times 1.5) 150 = 21 \text{ KIPS}$$

$$21 + 32 = 53 \text{ KIPS} \quad \frac{53,000}{19 \times 15} = 185 \text{ LBS/SF} = \text{OK}$$

$$\text{UPLIFT } 10.347 < 21 \text{ KIP (WT OF SLAB)} \quad \text{OK}$$

$$\text{HORIZONTAL } 7.4 \text{ KIPS} < 21 \text{ KIPS (WT OF SLAB)} \quad \text{OK}$$

## 3. CENTER COL

$$\text{VERTICAL } 40.27 \text{ KIPS}$$

$$\text{UPLIFT } 7.37 \text{ KIPS}$$

$$\text{HORIZONTAL } 7.47 \text{ KIPS}$$

3

3 cont

$$\text{WT OF SLAB} (15 \times 19 \times .41 + 4 \times 8 \times 1.5) 150 = 24.7 \text{ KIPS}$$

$$\text{VERT LOAD } 24.7 + 40.27 \text{ KIPS} = 64.97 \text{ KIPS}$$

$$\frac{64,970 \text{ lbs}}{15 \times 19} = \frac{227 \text{ lbs}}{\text{SF}} \quad \text{OK}$$

$$\text{UPLIFT } 7.37 \text{ KIPS} < 24.7 \text{ KIPS WT OF SLAB} \quad \text{OK}$$

$$\text{HORIZONTAL } 7.47 < 24.7 \text{ KIPS} \quad \text{OK}$$

4. PORTALS (PORTE COGHERE)

$$\begin{aligned} \text{LOAD} &= 17.7 \text{ KIPS} + (6.25 \times 9 \times .41 + \frac{2.5 \times 2.5 \times 1.5}{1000}) 150 \\ &= 17.7 \text{ KIPS} + 10.8 \text{ KIPS} = 18.5 \text{ KIPS} \end{aligned}$$

$$\frac{18.5 \times 1000}{6.25 \times 9} = 328 \text{ lb/ft}^2 \quad \text{OK}$$

$$\text{UPLIFT } 3.0 \text{ KIPS} < 18.5 \text{ KIPS} \quad \text{OK}$$

$$\text{HORIZONTAL } 2.65 < 18.5 \text{ KIPS} \quad \text{OK}$$