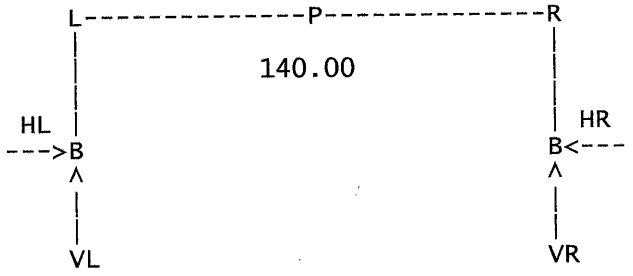
RUFFIN (37.4) DWES91 VALCOM INC
12-Jan-2012 08:51:05
DARREN Release 36.4

DESIGN FRAME #1
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 1

LEFT EH= 20.500 FT. LEFT RS: 1.170/12
RIGHT EH= 20.500 FT. RIGHT RS: 1.170/12
DISTANCE TO PEAK FROM LEFT SIDE: 70.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	4.87	5.21	4.87	5.21
COL	4.50	3.50	4.50	3.50
LL	10.80	8.39	10.87	8.41
SL	3.12	2.44	3.17	2.46
WLL	-32.22	-25.28	-23.85	-19.76
WLR	-23.85	-19.76	-32.22	-25.28
UBL	3.78	1.90	3.82	3.00
UBR	3.78	2.99	3.82	1.91
WLL1	-24.74	-20.44	-24.74	-20.44
WLR1	-9.40	-8.16	-9.40	-8.16
WEW	-17.90	-15.69	-17.90	-15.69
SEIL	-0.49	-0.15	0.48	0.15
SEIR	0.48	0.15	-0.49	-0.15
WLL2	-25.25	-18.79	-16.88	-13.27
WLR2	-16.88	-13.27	-25.25	-18.79
WLL3	-31.65	-26.93	-31.65	-26.93
WLR3	-16.46	-14.65	-16.46	-14.65
COMB # 1	20.18	17.10	20.24	17.12
COMB # 2	13.15	10.61	13.19	11.72
COMB # 5	-29.29	-22.16	-20.93	-16.63
COMB # 7	-20.92	-16.63	-29.29	-22.16
COMB # 37	-14.98	-12.56	-14.98	-12.56
COMB # 60	-28.73	-23.80	-28.73	-23.80

DESIGN FRAME #1
PRELIMINARY FRAME COLUMN REACTIONS

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(DL+ UBL+ COL)

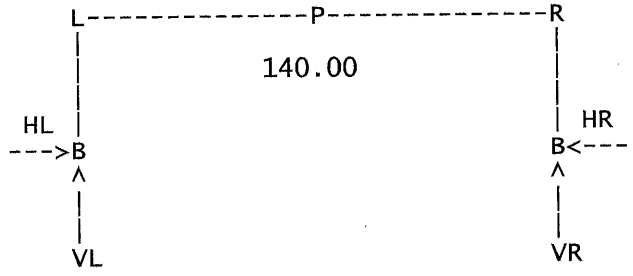
COMB # 5--> 1.00 X(0.60DL+ WLL)
COMB # 7--> 1.00 X(0.60DL+ WLR)
COMB # 37--> 1.00 X(0.60DL+ WEW)
COMB # 60--> 1.00 X(0.60DL+ WLL3)
UBL->0.30X SNOW LOAD ON FRONT SLOPE ROOF + 1.00X SNOW LOAD ON REAR SLOPE ROOF
UBR->0.30X SNOW LOAD ON REAR SLOPE ROOF + 1.00X SNOW LOAD ON FRONT SLOPE ROOF

♀

DESIGN FRAME #2
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 2 3 4 5 6

LEFT EH= 20.500 FT. LEFT RS: 1.170/12
RIGHT EH= 20.500 FT. RIGHT RS: 1.170/12
DISTANCE TO PEAK FROM LEFT SIDE: 70.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	8.34	8.18	8.34	8.19
COL	10.76	8.58	10.76	8.57
LL	25.91	20.56	26.06	20.60
SL	7.48	5.99	7.57	6.02
WLL	-46.29	-36.91	-34.77	-30.69
WLR	-34.77	-30.69	-46.29	-36.91
UBL	9.06	4.68	9.14	7.40
UBR	9.07	7.38	9.15	4.70
WLL1	-25.82	-22.53	-25.82	-22.54
WLR1	-8.45	-8.39	-8.45	-8.40
WEW	-42.45	-38.44	-42.45	-38.44
SEIL	-1.04	-0.31	1.04	0.31
SEIR	1.03	0.31	-1.04	-0.31
WLL2	-29.57	-21.00	-18.05	-14.79
WLR2	-18.05	-14.78	-29.57	-21.00
WLL3	-42.45	-38.44	-42.45	-38.44
WLR3	-25.33	-24.30	-25.33	-24.30
COMB # 1	45.02	37.32	45.16	37.36
COMB # 2	28.17	21.43	28.25	24.17
COMB # 3	28.17	24.14	28.25	21.46
COMB # 5	-41.28	-32.00	-29.77	-25.78
COMB # 7	-29.77	-25.78	-41.29	-32.00
COMB # 37	-37.44	-33.53	-37.44	-33.53

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(DL+ UBL+ COL)
COMB # 3--> 1.00 X(DL+ UBR+ COL)

♀

REACOUT
DESIGN FRAME #2
PRELIMINARY FRAME COLUMN REACTIONS
==========

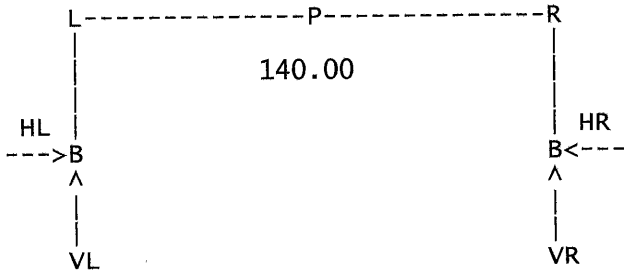
LOAD COMBINATIONS: (CONT'D)

COMB # 5--> 1.00 X(0.60DL+ WLL)
COMB # 7--> 1.00 X(0.60DL+ WLR)
COMB # 37--> 1.00 X(0.60DL+ WEW)
UBL->0.30X SNOW LOAD ON FRONT SLOPE ROOF + 1.00X SNOW LOAD ON REAR SLOPE ROOF
UBR->0.30X SNOW LOAD ON REAR SLOPE ROOF + 1.00X SNOW LOAD ON FRONT SLOPE ROOF

DESIGN FRAME #3
PRELIMINARY FRAME COLUMN REACTIONS
==========

FRAME LINES: 7

LEFT EH= 20.500 FT. LEFT RS: 1.170/12
RIGHT EH= 20.500 FT. RIGHT RS: 1.170/12
DISTANCE TO PEAK FROM LEFT SIDE: 70.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	5.23	5.19	5.23	5.19
COL	5.13	4.02	5.13	4.02
LL	12.34	9.65	12.41	9.67
SL	3.57	2.81	3.61	2.82
WLL	-34.86	-27.55	-25.79	-21.63
WLR	-25.79	-21.63	-34.86	-27.55
UBL	4.32	2.18	4.36	3.46
UBR	4.32	3.45	4.36	2.20
WLL1	-26.15	-21.82	-26.15	-21.82
WLR1	-9.85	-8.67	-9.85	-8.67
WEW	-20.40	-18.04	-20.40	-18.04
SEIL	-0.53	-0.16	0.53	0.16
SEIR	0.53	0.16	-0.53	-0.16
WLL2	-26.92	-20.08	-17.85	-14.17
WLR2	-17.85	-14.17	-26.92	-20.08
WLL3	-34.02	-29.28	-34.02	-29.28
WLR3	-17.90	-16.14	-17.90	-16.14
COMB # 1	22.70	18.87	22.77	18.89
COMB # 2	14.68	11.40	14.72	12.68
COMB # 5	-31.73	-24.43	-22.65	-18.52
COMB # 7	-22.65	-18.52	-31.73	-24.43
COMB # 37	-17.27	-14.93	-17.27	-14.93
COMB # 60	-30.89	-26.17	-30.89	-26.17

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(DL+ UBL+ COL)
COMB # 5--> 1.00 X(0.60DL+ WLL)

DESIGN FRAME #3
PRELIMINARY FRAME COLUMN REACTIONS

LOAD COMBINATIONS: (CONT'D)

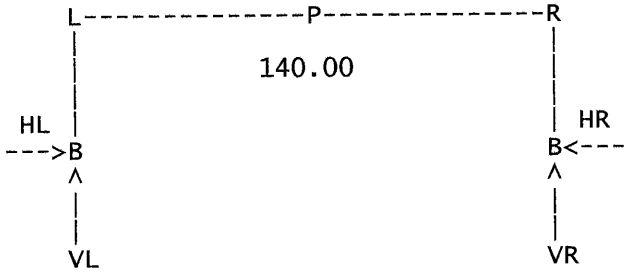
COMB # 7--> 1.00 X(0.60DL+ WLR)
COMB # 37--> 1.00 X(0.60DL+ WEW)
COMB # 60--> 1.00 X(0.60DL+ WLL3)
UBL->0.30X SNOW LOAD ON FRONT SLOPE ROOF + 1.00X SNOW LOAD ON REAR SLOPE ROOF
UBR->0.30X SNOW LOAD ON REAR SLOPE ROOF + 1.00X SNOW LOAD ON FRONT SLOPE ROOF

RUFFIN (37.4) DWES91
12-Jan-2012 08:51:05 VALCOM INC
DARREN Release 36.4

DESIGN FRAME #1
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 1

LEFT EH= 20.500 FT. LEFT RS: 1.170/12
RIGHT EH= 20.500 FT. RIGHT RS: 1.170/12
DISTANCE TO PEAK FROM LEFT SIDE: 70.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	4.87	5.21	4.87	5.21
COL	4.50	3.50	4.50	3.50
LL	10.80	8.39	10.87	8.41
SL	3.12	2.44	3.17	2.46
WLL	-32.22	-25.28	-23.85	-19.76
WLR	-23.85	-19.76	-32.22	-25.28
UBL	3.78	1.90	3.82	3.00
UBR	3.78	2.99	3.82	1.91
WLL1	-24.74	-20.44	-24.74	-20.44
WLR1	-9.40	-8.16	-9.40	-8.16
WEW	-17.90	-15.69	-17.90	-15.69
SEIL	-0.49	-0.15	0.48	0.15
SEIR	0.48	0.15	-0.49	-0.15
WLL2	-25.25	-18.79	-16.88	-13.27
WLR2	-16.88	-13.27	-25.25	-18.79
WLL3	-31.65	-26.93	-31.65	-26.93

REACOUT

WLR3	-16.46	-14.65	-16.46	-14.65
COMB # 1	20.18	17.10	20.24	17.12
COMB # 2	13.15	10.61	13.19	11.72
COMB # 5	-29.29	-22.16	-20.93	-16.63
COMB # 7	-20.92	-16.63	-29.29	-22.16
COMB # 37	-14.98	-12.56	-14.98	-12.56
COMB # 60	-28.73	-23.80	-28.73	-23.80

♀

DESIGN FRAME #1
PRELIMINARY FRAME COLUMN REACTIONS
==========

LOAD COMBINATIONS:

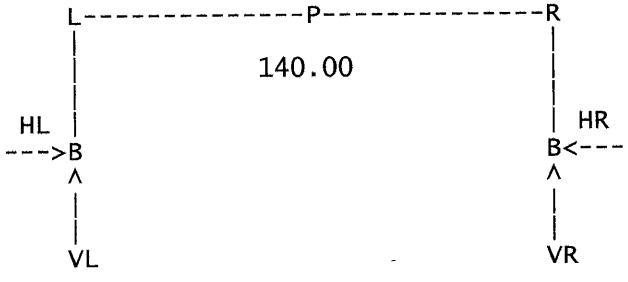
COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(DL+ UBL+ COL)
COMB # 5--> 1.00 X(0.60DL+ WLL)
COMB # 7--> 1.00 X(0.60DL+ WLR)
COMB # 37--> 1.00 X(0.60DL+ WEW)
COMB # 60--> 1.00 X(0.60DL+ WLL3)
UBL->0.30X SNOW LOAD ON FRONT SLOPE ROOF + 1.00X SNOW LOAD ON REAR SLOPE ROOF
UBR->0.30X SNOW LOAD ON REAR SLOPE ROOF + 1.00X SNOW LOAD ON FRONT SLOPE ROOF

♀

DESIGN FRAME #2
PRELIMINARY FRAME COLUMN REACTIONS
==========

FRAME LINES: 2 3 4 5 6

LEFT EH= 20.500 FT. LEFT RS: 1.170/12
RIGHT EH= 20.500 FT. RIGHT RS: 1.170/12
DISTANCE TO PEAK FROM LEFT SIDE: 70.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	8.34	8.18	8.34	8.19
COL	10.76	8.58	10.76	8.57
LL	25.91	20.56	26.06	20.60
SL	7.48	5.99	7.57	6.02
WLL	-46.29	-36.91	-34.77	-30.69
WLR	-34.77	-30.69	-46.29	-36.91
UBL	9.06	4.68	9.14	7.40
UBR	9.07	7.38	9.15	4.70
WLL1	-25.82	-22.53	-25.82	-22.54
WLR1	-8.45	-8.39	-8.45	-8.40
WEW	-42.45	-38.44	-42.45	-38.44
SEIL	-1.04	-0.31	1.04	0.31
SEIR	1.03	0.31	-1.04	-0.31
WLL2	-29.57	-21.00	-18.05	-14.79

REACOUT

WLR2	-18.05	-14.78	-29.57	-21.00
WLL3	-42.45	-38.44	-42.45	-38.44
WLR3	-25.33	-24.30	-25.33	-24.30
COMB # 1	45.02	37.32	45.16	37.36
COMB # 2	28.17	21.43	28.25	24.17
COMB # 3	28.17	24.14	28.25	21.46
COMB # 5	-41.28	-32.00	-29.77	-25.78
COMB # 7	-29.77	-25.78	-41.29	-32.00
COMB # 37	-37.44	-33.53	-37.44	-33.53

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(DL+ UBL+ COL)
COMB # 3--> 1.00 X(DL+ UBR+ COL)

♀

DESIGN FRAME #2
PRELIMINARY FRAME COLUMN REACTIONS

LOAD COMBINATIONS: (CONT'D)

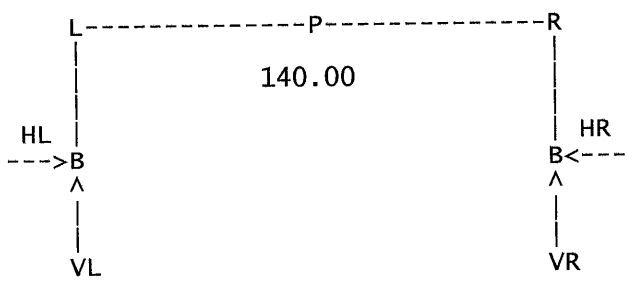
COMB # 5--> 1.00 X(0.60DL+ WLL)
COMB # 7--> 1.00 X(0.60DL+ WLR)
COMB # 37--> 1.00 X(0.60DL+ WEW)
UBL->0.30X SNOW LOAD ON FRONT SLOPE ROOF + 1.00X SNOW LOAD ON REAR SLOPE ROOF
UBR->0.30X SNOW LOAD ON REAR SLOPE ROOF + 1.00X SNOW LOAD ON FRONT SLOPE ROOF

♀

DESIGN FRAME #3
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 7

LEFT EH= 20.500 FT. LEFT RS: 1.170/12
RIGHT EH= 20.500 FT. RIGHT RS: 1.170/12
DISTANCE TO PEAK FROM LEFT SIDE: 70.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	5.23	5.19	5.23	5.19
COL	5.13	4.02	5.13	4.02
LL	12.34	9.65	12.41	9.67
SL	3.57	2.81	3.61	2.82
WLL	-34.86	-27.55	-25.79	-21.63
WLR	-25.79	-21.63	-34.86	-27.55
UBL	4.32	2.18	4.36	3.46
UBR	4.32	3.45	4.36	2.20
WLL1	-26.15	-21.82	-26.15	-21.82

REACOUT

WLR1	-9.85	-8.67	-9.85	-8.67
WEW	-20.40	-18.04	-20.40	-18.04
SEIL	-0.53	-0.16	0.53	0.16
SEIR	0.53	0.16	-0.53	-0.16
WLL2	-26.92	-20.08	-17.85	-14.17
WLR2	-17.85	-14.17	-26.92	-20.08
WLL3	-34.02	-29.28	-34.02	-29.28
WLR3	-17.90	-16.14	-17.90	-16.14
COMB # 1	22.70	18.87	22.77	18.89
COMB # 2	14.68	11.40	14.72	12.68
COMB # 5	-31.73	-24.43	-22.65	-18.52
COMB # 7	-22.65	-18.52	-31.73	-24.43
COMB # 37	-17.27	-14.93	-17.27	-14.93
COMB # 60	-30.89	-26.17	-30.89	-26.17

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(DL+ UBL+ COL)
COMB # 5--> 1.00 X(0.60DL+ WLL)

DESIGN FRAME #3
PRELIMINARY FRAME COLUMN REACTIONS

LOAD COMBINATIONS: (CONT'D)

COMB # 7--> 1.00 X(0.60DL+ WLR)
COMB # 37--> 1.00 X(0.60DL+ WEW)
COMB # 60--> 1.00 X(0.60DL+ WLL3)
UBL->0.30X SNOW LOAD ON FRONT SLOPE ROOF + 1.00X SNOW LOAD ON REAR SLOPE ROOF
UBR->0.30X SNOW LOAD ON REAR SLOPE ROOF + 1.00X SNOW LOAD ON FRONT SLOPE ROOF

RUFFIN (37.4) DWES91
12-Jan-2012 08:50:55 VALCOM INC
DARREN Release 36.4

ENDWALL DESIGN SYSTEM

***** ENDWALL C COLUMN DESIGN *****

PRELIMINARY COLUMN REACTIONS

COLUMN LOCATIONS (FT) ARE FROM SIDEWALL A.

APPLIED LOAD CASES AND COMBINATIONS	COL @ 15.00 HORIZ (KIPS)	COL @ 15.00 VERT (KIPS)	COL @ 40.00 HORIZ (KIPS)	COL @ 40.00 VERT (KIPS)	COL @ 60.00 HORIZ (KIPS)	COL @ 60.00 VERT (KIPS)	COL @ 80.00 HORIZ (KIPS)	COL @ 80.00 VERT (KIPS)
DL	0.00	0.51	0.00	0.57	0.00	0.73	0.00	0.73
COL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WL+	4.50	0.00	5.57	0.00	5.36	0.00	5.36	0.00
WL-	-5.00	0.00	-6.19	0.00	-5.96	0.00	-5.96	0.00
DL + LL + COL	0.00	0.51	0.00	0.57	0.00	0.73	0.00	0.73
DL + SL + COL	0.00	0.51	0.00	0.57	0.00	0.73	0.00	0.73
0.6DL + WL+	4.50	0.31	5.57	0.34	5.36	0.44	5.36	0.44
0.6DL + WL-	-5.00	0.31	-6.19	0.34	-5.96	0.44	-5.96	0.44
DL+0.75(SL+COL+WL+)	3.38	0.51	4.18	0.57	4.02	0.73	4.02	0.73
DL+0.75(SL+COL+WL-)	-3.75	0.51	-4.64	0.57	-4.47	0.73	-4.47	0.73
DL+0.75(LL+COL+WL+)	3.38	0.51	4.18	0.57	4.02	0.73	4.02	0.73

REACOUT

DL+0.75(LL+COL+WL-)	-3.75	0.51	-4.64	0.57	-4.47	0.73	-4.47	0.73
DL + UBL + COL	0.00	0.51	0.00	0.57	0.00	0.73	0.00	0.73
DL + UBR + COL	0.00	0.51	0.00	0.57	0.00	0.73	0.00	0.73

APPLIED LOAD CASES AND COMBINATIONS	COL @ 100.00 HORIZ (KIPS)	COL @ 100.00 VERT (KIPS)	COL @ 125.00 HORIZ (KIPS)	COL @ 125.00 VERT (KIPS)
DL	0.00	0.57	0.00	0.51
COL	0.00	0.00	0.00	0.00
LL	0.00	0.00	0.00	0.00
SL	0.00	0.00	0.00	0.00
WL+	5.57	0.00	4.50	0.00
WL-	-6.19	0.00	-5.00	0.00
DL + LL + COL	0.00	0.57	0.00	0.51
DL + SL + COL	0.00	0.57	0.00	0.51
0.6DL + WL+	5.57	0.34	4.50	0.31
0.6DL + WL-	-6.19	0.34	-5.00	0.31
DL+0.75(SL+COL+WL+)	4.18	0.57	3.38	0.51
DL+0.75(SL+COL+WL-)	-4.64	0.57	-3.75	0.51
DL+0.75(LL+COL+WL+)	4.18	0.57	3.38	0.51
DL+0.75(LL+COL+WL-)	-4.64	0.57	-3.75	0.51
DL + UBL + COL	0.00	0.57	0.00	0.51
DL + UBR + COL	0.00	0.57	0.00	0.51

ENDWALL DESIGN SYSTEM

***** ENDWALL D COLUMN DESIGN *****

PRELIMINARY COLUMN REACTIONS

COLUMN LOCATIONS (FT) ARE FROM SIDEWALL A.

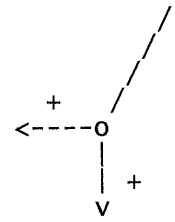
APPLIED LOAD CASES AND COMBINATIONS	COL @ 15.00 HORIZ (KIPS)	COL @ 15.00 VERT (KIPS)	COL @ 40.00 HORIZ (KIPS)	COL @ 40.00 VERT (KIPS)	COL @ 60.00 HORIZ (KIPS)	COL @ 60.00 VERT (KIPS)	COL @ 80.00 HORIZ (KIPS)	COL @ 80.00 VERT (KIPS)
DL	0.00	0.38	0.00	0.42	0.00	0.46	0.00	0.46
COL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WL+	4.50	0.00	5.57	0.00	5.36	0.00	5.36	0.00
WL-	-5.00	0.00	-6.19	0.00	-5.96	0.00	-5.96	0.00
DL + LL + COL	0.00	0.38	0.00	0.42	0.00	0.46	0.00	0.46
DL + SL + COL	0.00	0.38	0.00	0.42	0.00	0.46	0.00	0.46
0.6DL + WL+	4.50	0.23	5.57	0.25	5.36	0.28	5.36	0.28
0.6DL + WL-	-5.00	0.23	-6.19	0.25	-5.96	0.28	-5.96	0.28
DL+0.75(SL+COL+WL+)	3.38	0.38	4.18	0.42	4.02	0.46	4.02	0.46
DL+0.75(SL+COL+WL-)	-3.75	0.38	-4.64	0.42	-4.47	0.46	-4.47	0.46
DL+0.75(LL+COL+WL+)	3.38	0.38	4.18	0.42	4.02	0.46	4.02	0.46
DL+0.75(LL+COL+WL-)	-3.75	0.38	-4.64	0.42	-4.47	0.46	-4.47	0.46
DL + UBL + COL	0.00	0.38	0.00	0.42	0.00	0.46	0.00	0.46
DL + UBR + COL	0.00	0.38	0.00	0.42	0.00	0.46	0.00	0.46

APPLIED LOAD CASES AND COMBINATIONS	COL @ 100.00 HORIZ (KIPS)	COL @ 100.00 VERT (KIPS)	COL @ 125.00 HORIZ (KIPS)	COL @ 125.00 VERT (KIPS)

			REACOUT	
DL	0.00	0.42	0.00	0.38
COL	0.00	0.00	0.00	0.00
LL	0.00	0.00	0.00	0.00
SL	0.00	0.00	0.00	0.00
WL+	5.57	0.00	4.50	0.00
WL-	-6.19	0.00	-5.00	0.00
DL + LL + COL	0.00	0.42	0.00	0.38
DL + SL + COL	0.00	0.42	0.00	0.38
0.6DL + WL+	5.57	0.25	4.50	0.23
0.6DL + WL-	-6.19	0.25	-5.00	0.23
DL+0.75(SL+COL+WL+)	4.18	0.42	3.38	0.38
DL+0.75(SL+COL+WL-)	-4.64	0.42	-3.75	0.38
DL+0.75(LL+COL+WL+)	4.18	0.42	3.38	0.38
DL+0.75(LL+COL+WL-)	-4.64	0.42	-3.75	0.38
DL + UBL + COL	0.00	0.42	0.00	0.38
DL + UBR + COL	0.00	0.42	0.00	0.38

***** BRACING DESIGN *****

DIAGONAL X-BRACE DESIGN REACTIONS

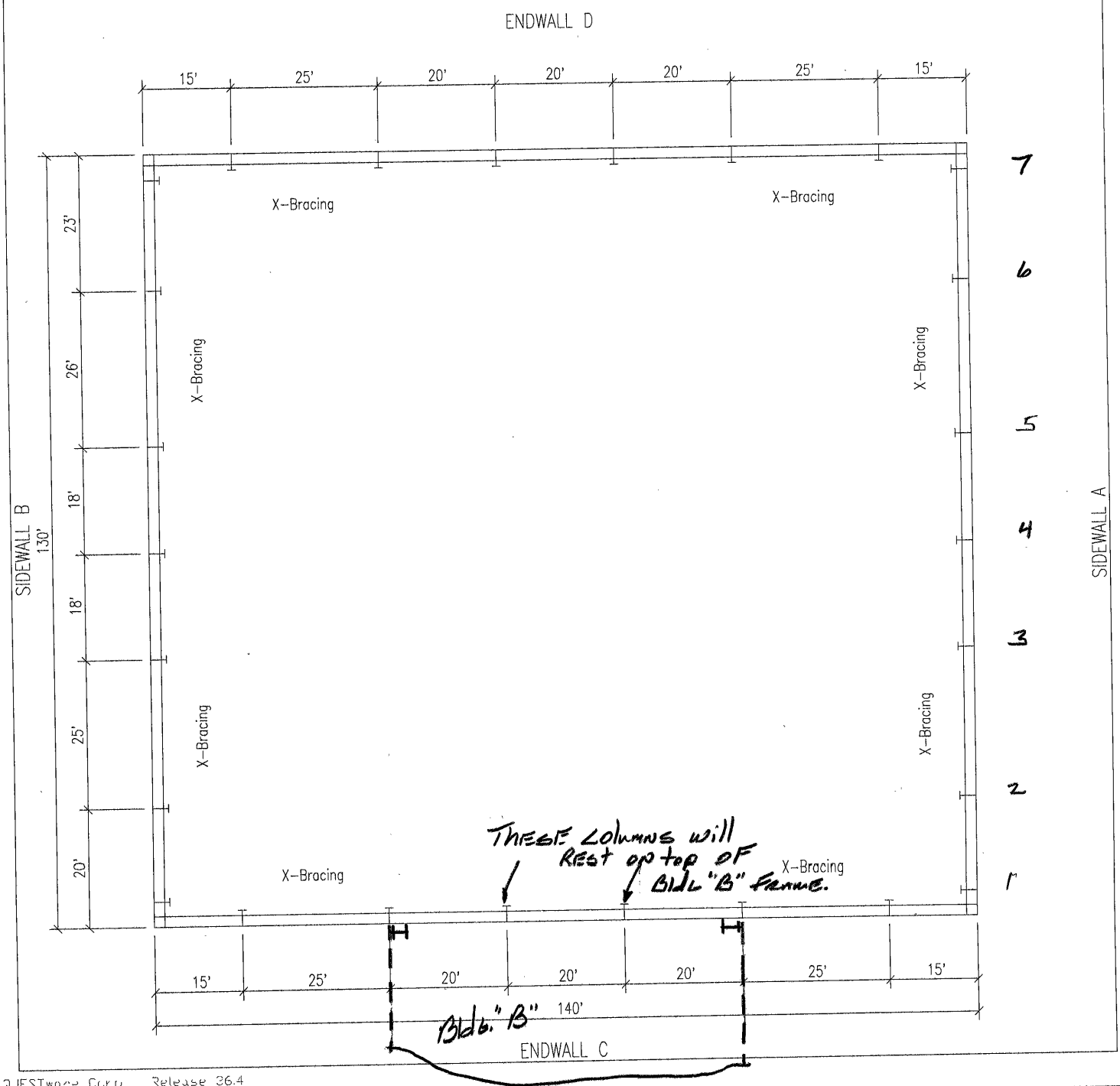


WALL	BRACED BAY #	LOAD NAME	DIST FROM EWC (FT)	DIST FROM SWA (FT)	HORIZONTAL (KIPS)	VERTICAL (KIPS)
SWB	2	WLB+	20.00		8.21	6.73
SWB	2	WLB-	45.00		-8.21	6.73
SWB	2	SEI+	20.00		4.90	4.02
SWB	2	SEI-	45.00		-4.90	4.02
SWA	2	WLB+	20.00		8.21	6.73
SWA	2	WLB-	45.00		-8.21	6.73
SWA	2	SEI+	20.00		4.90	4.02
SWA	2	SEI-	45.00		-4.90	4.02
SWB	5	WLB+	81.00		8.21	6.47
SWB	5	WLB-	107.00		-8.21	6.47
SWB	5	SEI+	81.00		4.90	3.86
SWB	5	SEI-	107.00		-4.90	3.86
SWA	5	WLB+	81.00		8.21	6.47
SWA	5	WLB-	107.00		-8.21	6.47
SWA	5	SEI+	81.00		4.90	3.86
SWA	5	SEI-	107.00		-4.90	3.86
EWC	2	WLB-		15.00	2.02	1.98
EWC	2	SEI-		15.00	1.85	1.80
EWC	2	WLB+		40.00	2.02	1.78
EWC	2	SEI+		40.00	1.85	1.62
EWC	6	WLB-		100.00	2.02	1.78
EWC	6	SEI-		100.00	1.85	1.62
EWC	6	WLB+		125.00	2.02	1.98
EWC	6	SEI+		125.00	1.85	1.80
EWD	2	WLB-		15.00	2.02	1.98
EWD	2	SEI-		15.00	1.85	1.81
EWD	2	WLB+		40.00	2.02	1.78

			REACOUT		
EWD	2	SEI+	40.00	1.85	1.63
EWD	6	WLB-	100.00	2.02	1.78
EWD	6	SEI-	100.00	1.85	1.63
EWD	6	WLB+	125.00	2.02	1.98
EWD	6	SEI+	125.00	1.85	1.81

QUESTware CORP.	JOB NO: DWES91	PAGE: OF

TOP VIEW

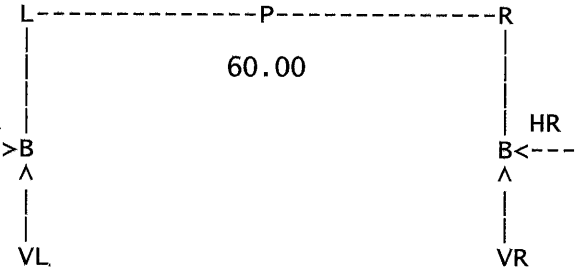


RUFFIN (37.4) VAL091
11-Jan-2012 08:54:19 VALCOM INC
ERIC Release 36.4

DESIGN FRAME #1
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 1

LEFT EH= 16.000 FT. LEFT RS: 1.000/12
RIGHT EH= 16.000 FT. RIGHT RS: 1.000/12
DISTANCE TO PEAK FROM LEFT SIDE: 30.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	1.50	2.63	1.50	2.63
COL	1.59	2.25	1.59	2.25
LL	3.81	5.39	3.85	5.41
WLL	-12.27	-15.77	-5.48	-10.36
WLR	-5.48	-10.36	-12.27	-15.77
WLL1	-7.28	-11.87	-7.28	-11.87
WLR1	-2.22	-4.67	-2.22	-4.67
WEW	-5.90	-11.60	-5.91	-11.60
WLL2	-10.21	-10.97	-3.41	-5.56
WLR2	-3.41	-5.56	-10.21	-10.97
WLL3	-9.33	-16.67	-9.33	-16.67
WLR3	-4.30	-9.47	-4.30	-9.47
COMB # 1	6.90	10.27	6.94	10.29
COMB # 2	-11.37	-14.19	-4.58	-8.78
COMB # 4	-4.58	-8.78	-11.37	-14.19
COMB # 18	-5.00	-10.02	-5.00	-10.02
COMB # 27	-8.42	-15.09	-8.42	-15.09

LOAD COMBINATIONS:

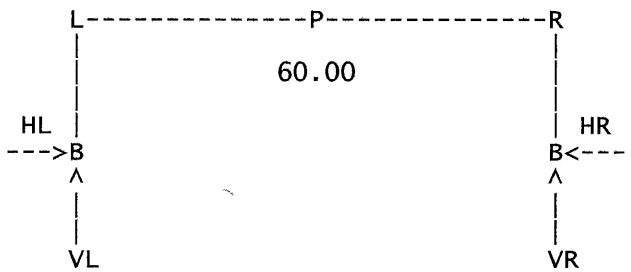
COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(0.60DL+ WLL)
COMB # 4--> 1.00 X(0.60DL+ WLR)
COMB # 18--> 1.00 X(0.60DL+ WEW)
COMB # 27--> 1.00 X(0.60DL+ WLL3)

DESIGN FRAME #2
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 2

REACOUT

LEFT EH= 16.000 FT. LEFT RS: 1.000/12
RIGHT EH= 16.000 FT. RIGHT RS: 1.000/12
DISTANCE TO PEAK FROM LEFT SIDE: 30.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	1.38	2.38	1.38	2.38
COL	1.49	2.25	1.49	2.25
LL	3.57	5.39	3.61	5.41
WLL	-8.07	-11.14	-3.52	-7.79
WLR	-3.51	-7.80	-8.07	-11.14
WLL1	-3.53	-6.80	-3.53	-6.80
WLR1	-0.73	-2.53	-0.73	-2.53
WEW	-5.39	-11.60	-5.39	-11.60
WLL2	-6.20	-6.35	-1.65	-2.99
WLR2	-1.64	-2.99	-6.19	-6.34
WLL3	-5.39	-11.60	-5.39	-11.60
WLR3	-2.61	-7.33	-2.61	-7.33
COMB # 1	6.44	10.02	6.48	10.04
COMB # 2	-7.24	-9.71	-2.69	-6.37
COMB # 4	-2.68	-6.37	-7.24	-9.71
COMB # 18	-4.56	-10.17	-4.56	-10.17

LOAD COMBINATIONS:

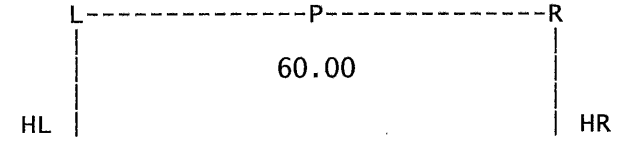
COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(0.60DL+ WLL)
COMB # 4--> 1.00 X(0.60DL+ WLR)
COMB # 18--> 1.00 X(0.60DL+ WEW)

RUFFIN (37.4) VAL091
11-Jan-2012 08:54:19 VALCOM INC
ERIC Release 36.4

DESIGN FRAME #1
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 1

LEFT EH= 16.000 FT. LEFT RS: 1.000/12
RIGHT EH= 16.000 FT. RIGHT RS: 1.000/12
DISTANCE TO PEAK FROM LEFT SIDE: 30.000 FT.



REACOUT

BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR
DL	1.50	2.63	1.50	2.63
COL	1.59	2.25	1.59	2.25
LL	3.81	5.39	3.85	5.41
WLL	-12.27	-15.77	-5.48	-10.36
WLR	-5.48	-10.36	-12.27	-15.77
WLL1	-7.28	-11.87	-7.28	-11.87
WLR1	-2.22	-4.67	-2.22	-4.67
WEW	-5.90	-11.60	-5.91	-11.60
WLL2	-10.21	-10.97	-3.41	-5.56
WLR2	-3.41	-5.56	-10.21	-10.97
WLL3	-9.33	-16.67	-9.33	-16.67
WLR3	-4.30	-9.47	-4.30	-9.47
COMB # 1	6.90	10.27	6.94	10.29
COMB # 2	-11.37	-14.19	-4.58	-8.78
COMB # 4	-4.58	-8.78	-11.37	-14.19
COMB # 18	-5.00	-10.02	-5.00	-10.02
COMB # 27	-8.42	-15.09	-8.42	-15.09

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(0.60DL+ WLL)
COMB # 4--> 1.00 X(0.60DL+ WLR)
COMB # 18--> 1.00 X(0.60DL+ WEW)
COMB # 27--> 1.00 X(0.60DL+ WLL3)

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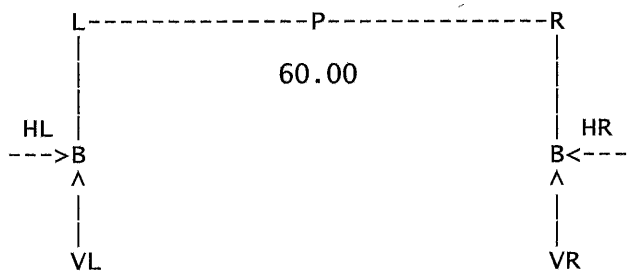
DESIGN FRAME #2
PRELIMINARY FRAME COLUMN REACTIONS

FRAME LINES: 2

LEFT EH= 16.000 FT. LEFT RS: 1.000/12
RIGHT EH= 16.000 FT. RIGHT RS: 1.000/12
DISTANCE TO PEAK FROM LEFT SIDE: 30.000 FT.



BUILDING LOADS	COLUMN REACTIONS (KIPS)			
	HL	VL	HR	VR

REACOUT

DL	1.38	2.38	1.38	2.38
COL	1.49	2.25	1.49	2.25
LL	3.57	5.39	3.61	5.41
WLL	-8.07	-11.14	-3.52	-7.79
WLR	-3.51	-7.80	-8.07	-11.14
WLL1	-3.53	-6.80	-3.53	-6.80
WLR1	-0.73	-2.53	-0.73	-2.53
WEW	-5.39	-11.60	-5.39	-11.60
WLL2	-6.20	-6.35	-1.65	-2.99
WLR2	-1.64	-2.99	-6.19	-6.34
WLL3	-5.39	-11.60	-5.39	-11.60
WLR3	-2.61	-7.33	-2.61	-7.33
COMB # 1	6.44	10.02	6.48	10.04
COMB # 2	-7.24	-9.71	-2.69	-6.37
COMB # 4	-2.68	-6.37	-7.24	-9.71
COMB # 18	-4.56	-10.17	-4.56	-10.17

LOAD COMBINATIONS:

COMB # 1--> 1.00 X(DL+ LL+ COL)
COMB # 2--> 1.00 X(0.60DL+ WLL)
COMB # 4--> 1.00 X(0.60DL+ WLR)
COMB # 18--> 1.00 X(0.60DL+ WEW)

ENDWALL DESIGN SYSTEM

***** ENDWALL C COLUMN DESIGN *****

PRELIMINARY COLUMN REACTIONS

COLUMN LOCATIONS (FT) ARE FROM SIDEWALL A.

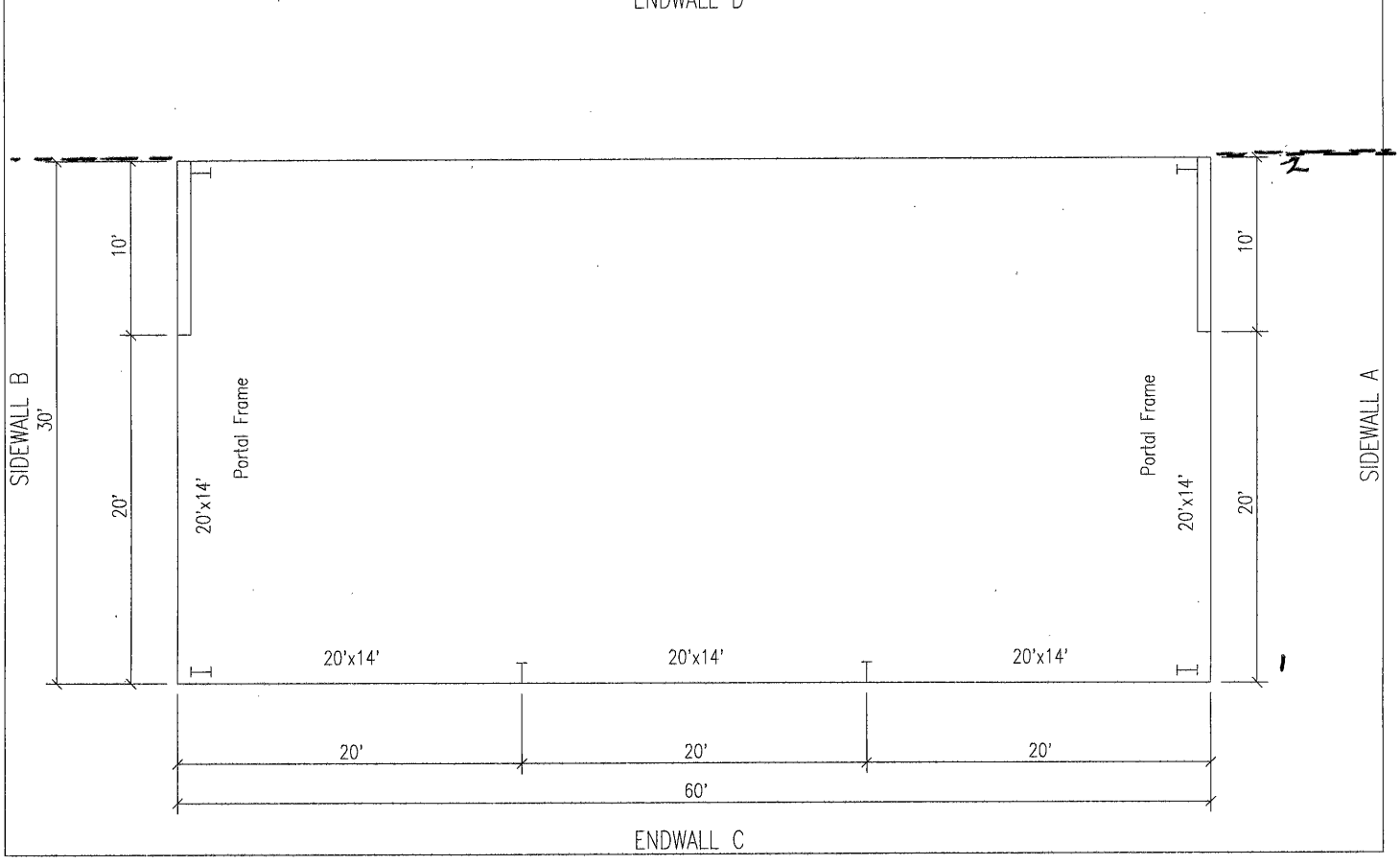
APPLIED LOAD CASES AND COMBINATIONS	COL @ 20.00 HORIZ (KIPS)	VERT (KIPS)	COL @ 40.00 HORIZ (KIPS)	VERT (KIPS)
DL	0.00	0.30	0.00	0.30
COL	0.00	0.00	0.00	0.00
LL	0.00	0.00	0.00	0.00
WL+	4.18	0.00	4.18	0.00
WL-	-4.62	0.00	-4.62	0.00
DL + LL + COL	0.00	0.30	0.00	0.30
0.6DL + WL+	4.18	0.18	4.18	0.18
0.6DL + WL-	-4.62	0.18	-4.62	0.18
DL+0.75(LL+COL+WL+)	3.13	0.30	3.13	0.30
DL+0.75(LL+COL+WL-)	-3.47	0.30	-3.47	0.30

***** PORTAL FRAME DESIGN *****
REACTIONS

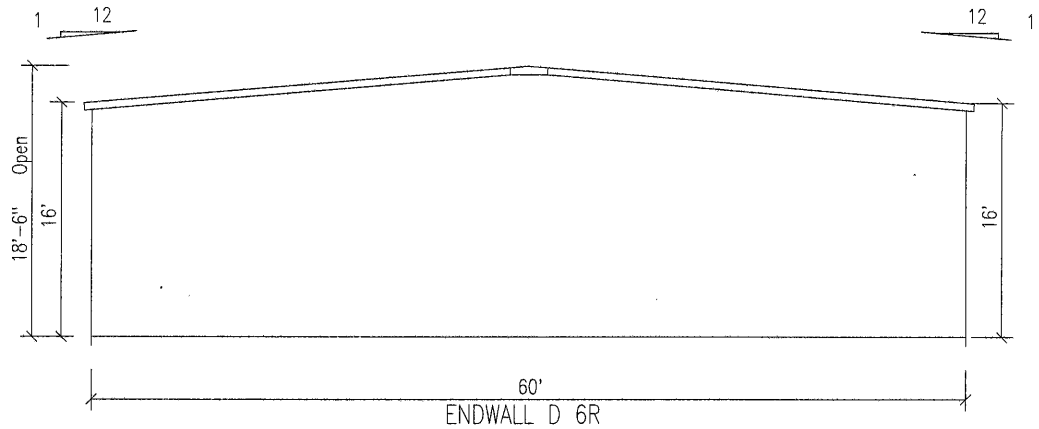
WALL	BRACED BAY #	LOAD NAME	DIST FROM EWC (FT)	DIST FROM SWA (FT)	HORIZONTAL (KIPS)	VERTICAL (KIPS)
SWA	1	WLB+	0.00		-2.88	-2.33
SWA	1	WLB+	30.00		-2.88	3.44
SWA	1	WLB-	0.00		2.88	3.44
SWA	1	WLB-	30.00		2.88	-2.33
SWB	1	WLB+	0.00		-2.88	-2.33
SWB	1	WLB+	30.00		-2.88	3.44
SWB	1	WLB-	0.00		2.88	3.44
SWB	1	WLB-	30.00		2.88	-2.33

QUESTware CORP.	JOB NO: VAL091	PAGE: OF

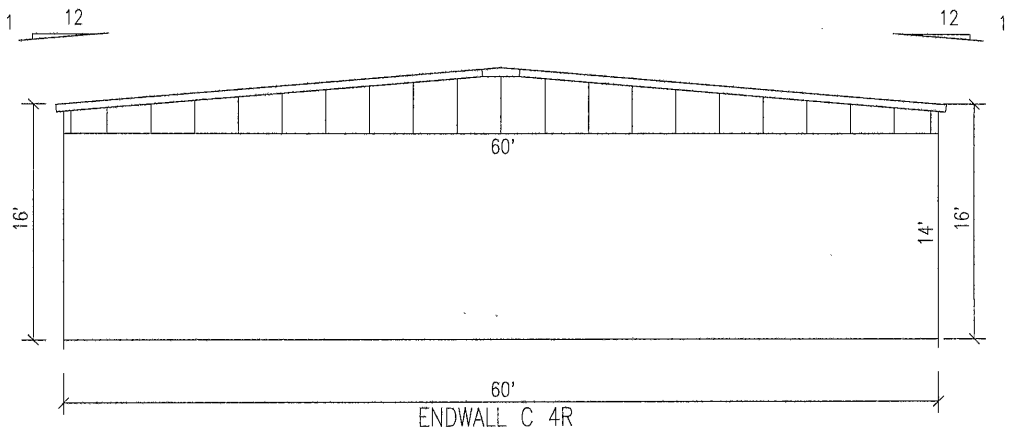
TOP VIEW



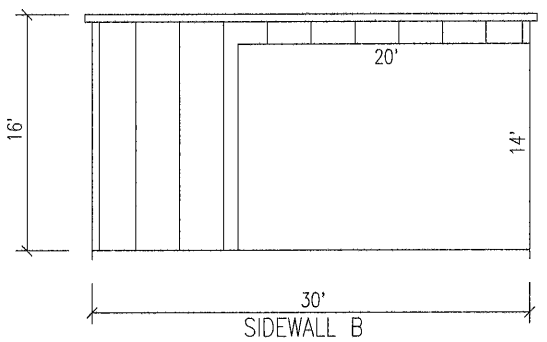
QUESTware CORP.	JOB NO: VAL091	PAGE: OF



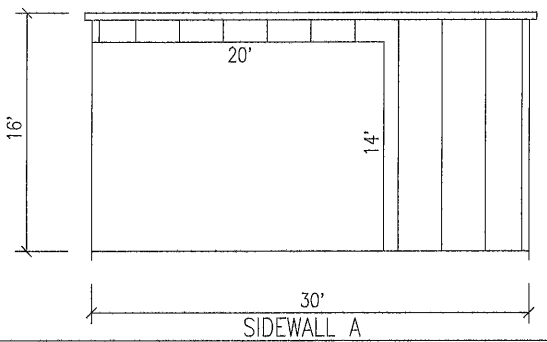
ENDWALL D 6R



ENDWALL C 4R



SIDEWALL B



SIDEWALL A