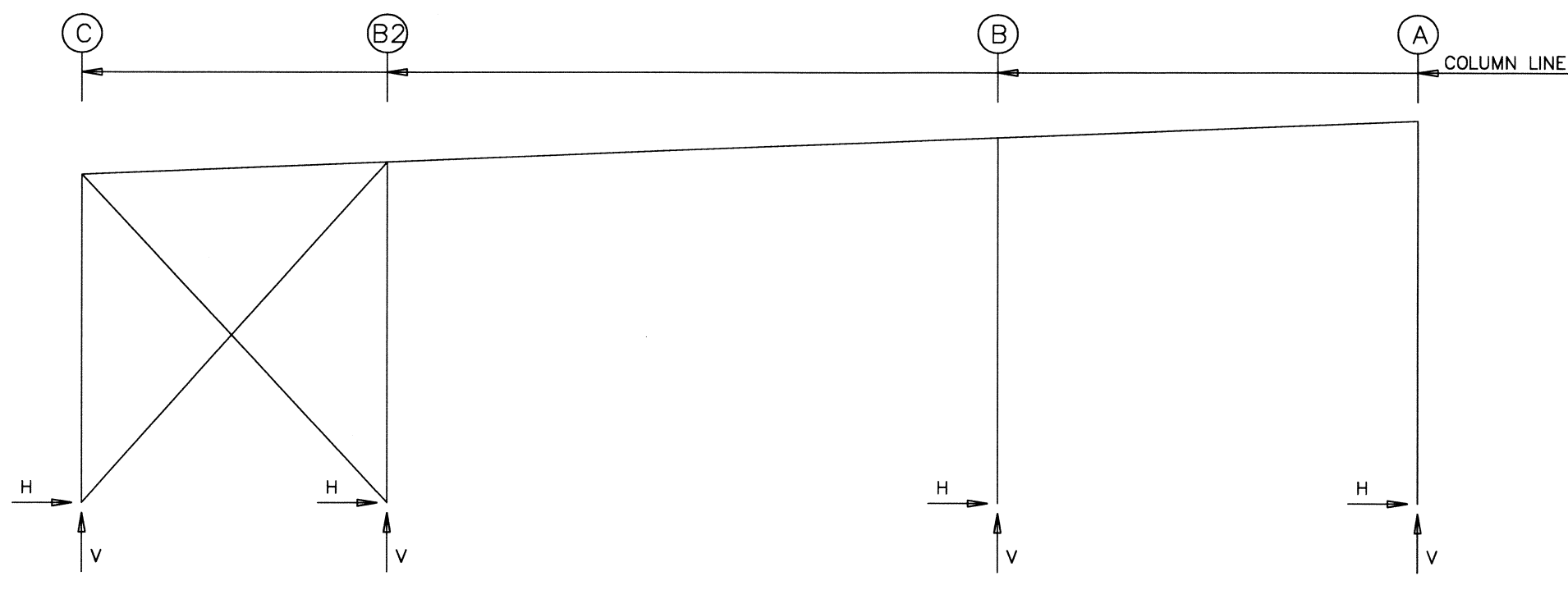


FRAME LINES: 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



UN-FACTORED COLUMNS REACTIONS (kips)

COL. LINE	DL	CO	LL	SL	W1	W2	WR1	WR2	LWP1	LWP2	LWN1	LWN2	EL	ER
HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.
C	0.01	0.86	0.00	0.42	0.01	2.92	0.01	2.92	-1.04	-3.56	2.63	-3.71	-3.85	-1.37
B2	-0.01	1.97	-0.01	1.34	-0.01	9.33	-0.01	9.32	-2.40	-14.14	0.01	-5.44	-2.89	-8.04
B	0.01	10.70	0.01	1.09	0.01	13.97	0.01	13.97	-0.22	-9.39	0.10	-9.41	0.02	-3.98
A	0.01	16.05	0.01	0.73	0.01	15.53	0.01	15.53	-0.20	-6.28	0.09	-6.28	0.02	-2.66
A	-0.01	9.82	-0.01	0.31	-0.01	8.49	-0.01	8.49	-2.15	-2.69	1.07	-2.70	0.20	-1.13

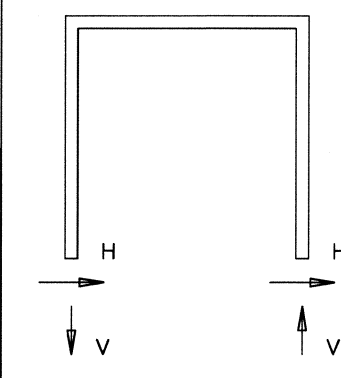
GENERAL NOTES

- FOUNDATION DESIGN AND CONSTRUCTION ARE NOT THE RESPONSIBILITY OF TARPON ENERGY SERVICES LTD. (STRUCTURES) ANCHOR BOLT DIAMETERS AND QUANTITIES SHOWN ON DRAWINGS BY TARPON ENERGY SERVICES LTD. (STRUCTURES) ARE THE MINIMUM REQUIRED FOR THE METAL BUILDING SYSTEM FOR THE SOLE PURPOSE OF DETERMINING THE HOLE DIAMETERS IN THE BASE PLATES. FINAL ANCHOR BOLT DIAMETERS, QUANTITIES AND EMBEDMENT LENGTHS IN CONCRETE ARE THE RESPONSIBILITY OF THE FOUNDATION DESIGNER.
- MINIMUM ANCHOR BOLT GRADE TO BE ASTM A307.
- THE BUILDING REACTION DATA REPORTS THE LOADS WHICH THIS BUILDING PLACES ON THE FOUNDATION. RIGID FRAME BASIC COLUMN REACTIONS, ENDWALL COLUMN REACTIONS AND BRACING REACTIONS ARE UNFACTORED IN KIPS.
- ANCHOR BOLTS SHALL BE ACCURATELY SET TO A TOLERANCE OF 3mm BOTH ELEVATION AND LOCATION IN ACCORDANCE WITH CISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS.
- COLUMN BASE PLATES ARE DESIGNED NOT TO EXCEED A BEARING PRESSURE OF 7.76 MPa
- MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE TO BE 20 MPa.
- FOUNDATION DESIGNER IS RESPONSIBLE TO DETERMINE MAXIMUM REACTIONS TO THE FOUNDATION BASED ON THE REPORTED UNFACTORED BUILDING REACTIONS.

NOTES FOR REACTIONS

- All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
- Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
- Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.
- Building reactions are based on the following building data:
  - Width (ft) = 90.0
  - Length (ft) = 495.0
  - Eave Height (ft) = 22.3/ 26.0
  - Roof Slope (rise/12) = 0.5
  - Dead Load (psf) = 5.0
  - Collateral Load (psf) = 3.0
  - Live Load (psf) = 20.9
  - Specified Snow Load (psf) = 10.4
  - Wind Load 1:50(psf) = 10.4
  - Wind Code = NBC 2005
  - Wind Category = 2
  - Exposure = 0
  - Importance Wind = 1.00
  - Importance Seismic = D
  - Site Class = D
  - Seismic Data:
    - Sa(0.2) = 0.1500
    - Sa(0.5) = 0.0900
    - Sa(1.0) = 0.0400
    - Sa(2.0) = 0.0200
- Building has not been designed for additional loads due to HVAC or Roof Top Units other than shown on drawing S4
- UNLESS SPECIFIED ABOVE, NO ADDITIONAL LOADS TO THE STRUCTURES HAVE BEEN ALLOWED FOR.

PORTAL FRAME REACTIONS



PORTAL FRAME +/- REACTIONS (UN-FACTORED - kips)

WALL LINE	COL. LINE	WIND	HORIZ.	VERT.	SEISMIC	VERT.
A,C	2, 3	6.40	10.68	0.00	0.00	0.00
A,C	15, 16	6.40	10.68	0.00	0.00	0.00

ENDWALL COLUMN

+/- REACTIONS (UN-FACTORED - kips) Out-Of-Plane

WALL LINE	COL. LINE	Wd P	Wd S	SEISMIC	HORIZ.	VERT.
1,17	C	-1.75	1.45	0.00	0.00	0.00
1,17	B2	-3.47	2.41	0.00	0.00	0.00
1,17	B1	-3.67	2.55	0.00	0.00	0.00
1,17	B	-3.21	2.23	0.00	0.00	0.00
1,17	A1	-2.59	1.84	0.00	0.00	0.00
1,17	A1	-1.47	1.25	0.00	0.00	0.00

MEZZANINE COLUMNS

REACTIONS (UN-FACTORED - kips)

COL. LINE	LL	DL	VERT.
ON LINE 2-16	A1	18.36	25.71
OFF LINE 2-16	A1	12.18	17.05

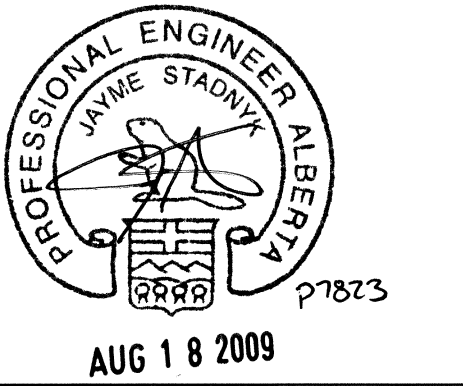
BASIC LOAD DEFINITIONS

DL	DEAD LOAD - SELF WEIGHT OF THE BUILDING SYSTEM
CO	COLLATERAL LOAD - ELECTRICAL, CEILING, SPRINKLERS, ECT.
LL	LIVE LOAD - INTENDED USE AND OCCUPANCY
SL	SNOW LOAD
W1	WIND FROM LEFT TO RIGHT, WITH POSITIVE INTERNAL PRESSURE (Cp/Cg) = +0.6
WR1	WIND FROM RIGHT TO LEFT, WITH POSITIVE INTERNAL PRESSURE (Cp/Cg) = +0.6
W2	WIND FROM LEFT TO RIGHT, WITH NEGATIVE INTERNAL PRESSURE (Cp/Cg) = -0.9
WR2	WIND FROM RIGHT TO LEFT, WITH NEGATIVE INTERNAL PRESSURE (Cp/Cg) = -0.9
LWP1	LONGITUDINAL WIND - POSITIVE INTERNAL PRESSURE - DIRECTION 1 (Cp/Cg) = +0.6
LWP2	LONGITUDINAL WIND - POSITIVE INTERNAL PRESSURE - DIRECTION 2 (Cp/Cg) = +0.6
LWN1	LONGITUDINAL WIND - NEGATIVE INTERNAL PRESSURE - DIRECTION 1 (Cp/Cg) = -0.9
LWN2	LONGITUDINAL WIND - NEGATIVE INTERNAL PRESSURE - DIRECTION 2 (Cp/Cg) = -0.9
EL	SEISMIC FORCE FROM LEFT TO RIGHT
ER	SEISMIC FORCE FROM RIGHT TO LEFT

- Cp/Cg Coefficients based on Category 2 Building

LOAD COMBINATIONS

1.4DL+1.4CO	1.25DL+1.25CO+1.5SL+0.4WR1	1.25DL+1.25CO+1.5SL+0.4WR2	1.25DL+1.25CO+1.4LWN2	0.9DL+0.9CO+1.4LW2
1.25DL+1.25CO+1.5SL+0.5SL	1.25DL+1.25CO+1.5SL+0.4WR1	1.25DL+1.25CO+1.5SL+0.4WR2	1.25DL+1.25CO+1.4LWN1+0.5SL	0.9DL+0.9CO+1.4WR1+0.5SL
1.25DL+1.25CO+1.5SL+0.4WL1	1.25DL+1.25CO+1.5SL+0.4LWP1	1.25DL+1.25CO+1.5SL+0.4LWP2	1.25DL+1.25CO+1.4LWN2+0.5SL	0.9DL+0.9CO+1.4WR2+0.5SL
1.25DL+1.25CO+1.5SL+0.4WR1	1.25DL+1.25CO+1.5SL+0.4LWN1	1.25DL+1.25CO+1.5SL+0.4LWN2	1.25DL+1.25CO+1.4LWN1+0.5SL	0.9DL+0.9CO+1.4WR1+0.5SL
1.25DL+1.25CO+1.5SL+0.4WR2	0.9DL+0.9CO+1.5SL	0.9DL+0.9CO+1.5SL	1.25DL+1.25CO+1.4LWN2+0.5SL	0.9DL+0.9CO+1.4WR2+0.5SL
1.25DL+1.25CO+1.5SL+0.4LWP1	1.25DL+1.25CO+1.5SL+0.4WL1	1.25DL+1.25CO+1.5SL+0.4WL2	1.25DL+1.25CO+1.4LWN1+0.5SL	0.9DL+0.9CO+1.4WR1+0.5SL
1.25DL+1.25CO+1.5SL+0.4LWP2	0.9DL+0.9CO+1.5SL+0.4WR1	0.9DL+0.9CO+1.5SL+0.4WR2	1.25DL+1.25CO+1.4LWN2+0.5SL	0.9DL+0.9CO+1.4WR2+0.5SL
1.25DL+1.25CO+1.5SL+0.4LWN1	0.9DL+0.9CO+1.5SL+0.4WR1	0.9DL+0.9CO+1.5SL+0.4WR2	1.25DL+1.25CO+1.4LWN1+0.5SL	0.9DL+0.9CO+1.4WR1+0.5SL
1.25DL+1.25CO+1.5SL+0.4LWN2	0.9DL+0.9CO+1.5SL+0.4WR2	0.9DL+0.9CO+1.5SL+0.4LWN1	1.25DL+1.25CO+1.4LWN2+0.5SL	0.9DL+0.9CO+1.4WR2+0.5SL
0.9DL+0.9CO+1.5SL	0.9DL+0.9CO+1.5SL+0.4LWP1	0.9DL+0.9CO+1.5SL+0.4LWP2	0.9DL+0.9CO+1.4LWN1+0.5SL	0.9DL+0.9CO+1.4WR1+0.5SL
0.9DL+0.9CO+1.5SL+0.4WL1	1.25DL+1.25CO+1.5SL	1.25DL+1.25CO+1.5SL	0.9DL+0.9CO+1.4LWN2+0.5SL	0.9DL+0.9CO+1.4WR2+0.5SL
0.9DL+0.9CO+1.5SL+0.4WL2	1.25DL+1.25CO+1.4LWP1	1.25DL+1.25CO+1.4LWP2	0.9DL+0.9CO+1.4LWN1+0.5SL	0.9DL+0.9CO+1.4WR1+0.5SL
0.9DL+0.9CO+1.5SL+0.4LWN1	1.25DL+1.25CO+1.4LWN1	1.25DL+1.25CO+1.4LWN2	1.0DL+1.0CO+1.0EL	1.0DL+1.0CO+1.0ER
0.9DL+0.9CO+1.5SL+0.4LWN2	0.9DL+0.9CO+1.4WR1	0.9DL+0.9CO+1.4WR2	1.0DL+1.0CO+1.0EL+0.5LL	1.0DL+1.0CO+1.0ER+0.5LL
0.9DL+0.9CO+1.5SL+0.4LWP1	0.9DL+0.9CO+1.4WR1	0.9DL+0.9CO+1.4WR2	1.0DL+1.0CO+1.0EL+0.25SL	1.0DL+1.0CO+1.0ER+0.25SL
0.9DL+0.9CO+1.5SL+0.4LWP2	0.9DL+0.9CO+1.4WR1	0.9DL+0.9CO+1.4WR2	0.9DL+0.9CO+1.4LW1	0.9DL+0.9CO+1.4LW2
1.25DL+1.25CO+1.5SL+0.5SL	1.25DL+1.25CO+1.4LWP1	1.25DL+1.25CO+1.4LWP2	0.9DL+0.9CO+1.4LW1	0.9DL+0.9CO+1.4LW2
1.25DL+1.25CO+1.5SL+0.4WL1	1.25DL+1.25CO+1.4LWN1	1.25DL+1.25CO+1.4LWN2	0.9DL+0.9CO+1.4LW1	0.9DL+0.9CO+1.4LW2



ISSUED FOR BUILDING PERMIT			
A	TT	JAS	AUG 12/09
ISSUE	DRAWN	CHECK	REVIEW DATE
ISSUE / REVISION			
END USER			
1472482 ALBERTA LTD			
CUSTOMER			
ACRE PROPERTIES LTD			
DESIGNED	DATE	DRAWN	DATE
JAS	AUG 6/09	TT	AUG 12/09
CHECKED	DATE	REVIEWED	DATE
MR	AUG 18/09	JAS	AUG 12/09



PROJECT	WRANGLER
DRAWING TITLE	SHOP AND OFFICE COMPLEX
REACTIONS AND NOTES	
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