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LUGBILL SUPPLY
MJN

# VARCO-PRUDEN

A DIVISION OF AMCA INTERNATIONAL CORP.

1800 Industrial Dr

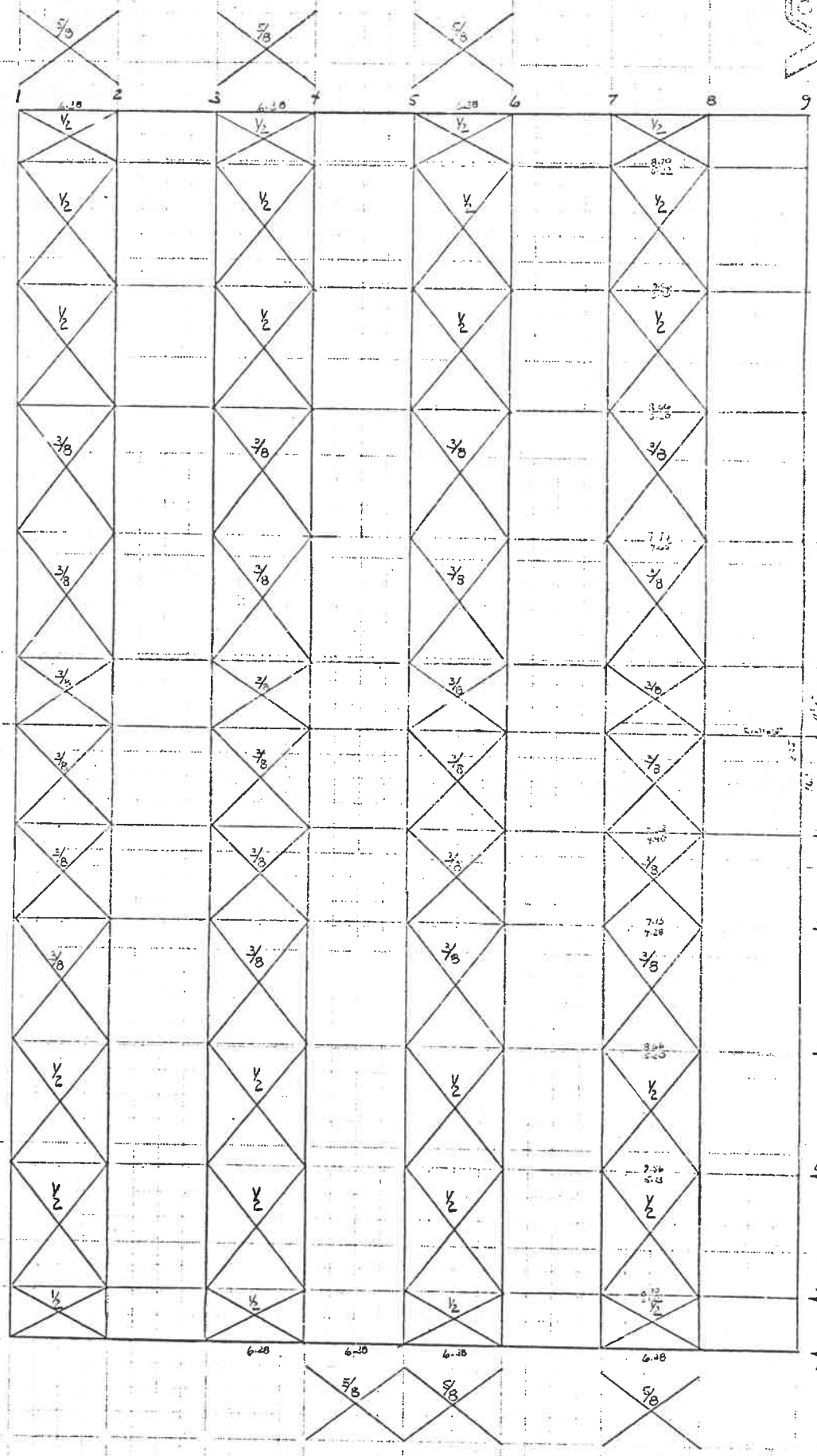
## STRUCTURAL CALCULATIONS

| | |
|---|---|
| JOB NO. | 38852 Book 1 |
| BUILDER | Lugbill Supply Center |
| CUSTOMER | Amsmar |
| PROJECT | |
| BUILDING SIZE | 200 x 210 x 29 |
| CITY | Napolean |
| STATE | Ohio |

STATE OF OHIO
TERRY L.
DEJONGHON
28

This seal applies only to those items
FURNISHED BY VARCO-PRUDEN BUILDINGS

TAKE OUT ½ OF THE WIND LOAD IN FUTURE PORTION



No. 28952
Page ___ of ___
Date 8-20-84
Prepared by K LARMIKSEN
Reviewed by ___

PIPE COLUMN DETAILS  V.P.  7" ϕ PIPE COLUMNS

$L_x = L_y = L_L = 30.458$  365.5

$P = 51.45^K$

$A = 8.45 \ IN^2$  $\frac{KL}{r} = \frac{1.00(30.458)(12)}{2.33} = 156.44$

$r = 2.33"$

$F_a = 6.17 \ KSI$

$6.17(8.45) = 52.16^K$ OK

BX E B.P. x ½"
4-¾" ⌀ A36

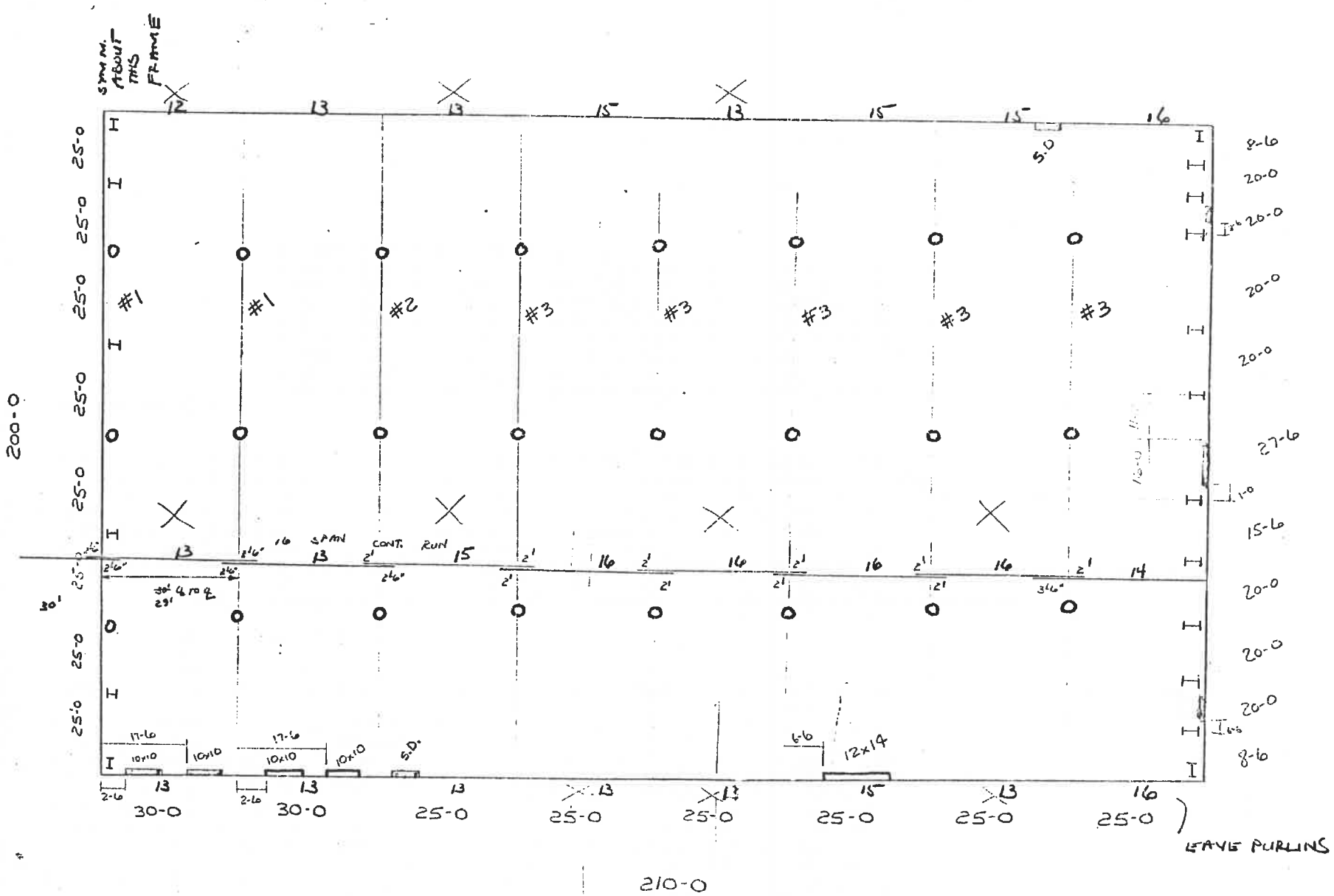
$M = FL \ Cx$

$\frac{1}{2}(.31)(3)^2 = 375\left(\frac{1}{6}\right)(1)(t)^2$

$t = .47"$

USE ½" THICK BASE PL & CAP PL

2


SPAN N. ABOUT THIS FRAME
#1
#1
#2
#3
#3
#3
#3
#3
SPAN CONT. RUN
30' @ TO ℄
29'
10x10
10x10
10x10
10x10
12x14
5.0
5.0
17-6
17-6
6-6
2-6
2-6
30-0
30-0
25-0
25-0
25-0
25-0
25-0
25-0
210-0
200-0
25-0
25-0
25-0
25-0
25-0
25-0
30'
8-6
20-0
20-0
20-0
20-0
27-6
15-6
20-0
20-0
20-0
8-6
EAVE PURLINS

VARCO-PRUDEN
A UNIT OF AMCA INTERNATIONAL CORPORATION

ENDWALL FRAME DESIGN - INPUT CONDITIONS

JOB: 38852 *
PAGE: 1
DATE: 8-30-84
PROFIT CENTER: WISCONSIN

JOB 38852 *
BUILDER LUGHILL SUPPLY CENTER
CUSTOMER (WAREHOUSE)
JOB SITE CITY ARCHBOLD, OHIO

BUILDING DESCRIPTION:

| ITEM | | FEET & INCHES | DEC. FT. | DEC. IN. | METERS |
|---|---|---|---|---|---|
| SPAN | = | 200'- 0 0/16 | 200.0000 | 2400.0000 | 60.9600 |
| BACK SIDEWALL HEIGHT | = | 29'- 0 0/16 | 29.0000 | 348.0000 | 8.8392 |
| FRONT SIDEWALL HEIGHT | = | 29'- 0 0/16 | 29.0000 | 348.0000 | 8.8392 |
| BUILDING LENGTH | = | 210'- 0 0/16 | 210.0000 | 2520.0000 | 64.0080 |
| RIDGE FROM BACK BLDG LN | = | 100'- 0 0/16 | 100.0000 | 1200.0000 | 30.4800 |
| ELEVATION OF FRONT COL. | = | 0'- 0 0/16 | 0.0 | 0.0 | 0.0 |
| BACK ROOF PITCH | = | 0.5000 : 12 | | | |
| FRONT ROOF PITCH | = | 0.5000 : 12 | | | |

LOADING: ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF (PURLINS & SHEETING) + FRAME WEIGHT = 6.97 PSF)
LIVE = 25.00 PSF
WIND = 20.54 PSF
SNOW = 20.00 PSF

THE ABOVE LOADS COMBINED WITH ANY SPECIAL LOADS APPEAR IN 6 LOAD CASES AS DESCRIBED BELOW:

| LOAD CODES | DESCRIPTION | | | | STRESS FACTORS |
|---|---|---|---|---|---|
| 1, 3, 0, 0, 0 | DEAD LOAD | LIVE LOAD | | | 1.00 |
| 1,11,41, 0, 0 | DEAD LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | | 1.33 |
| 1,23,41, 0, 0 | DEAD LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | | 1.33 |
| 1, 3,11,41, 0 | DEAD LOAD | LIVE LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | 1.33 |
| 1, 3,23,41, 0 | DEAD LOAD | LIVE LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | 1.33 |
| 1,15,16, 0, 0 | DEAD LOAD | SNOW BACK TO RIDGE | 1/2 SNOW FRT TO RIDG | | 1.00 |

BAY SPACINGS FOLLOW:

| | | | | |
|---|---|---|---|---|
| 1 BAY = | 30' 0 0/16" | BETWEEN FRAME LN. | 1 AND FRAME LN. | 2 |
| 2 BAY = | 30' 0 0/16" | BETWEEN FRAME LN. | 2 AND FRAME LN. | 3 |
| 3 BAY = | 25' 0 0/16" | BETWEEN FRAME LN. | 3 AND FRAME LN. | 4 |
| 4 BAY = | 25' 0 0/16" | BETWEEN FRAME LN. | 4 AND FRAME LN. | 5 |
| 5 BAY = | 25' 0 0/16" | BETWEEN FRAME LN. | 5 AND FRAME LN. | 6 |
| 6 BAY = | 25' 0 0/16" | BETWEEN FRAME LN. | 6 AND FRAME LN. | 7 |
| 7 BAY = | 25' 0 0/16" | BETWEEN FRAME LN. | 7 AND FRAME LN. | 8 |
| 8 BAY = | 25' 0 0/16" | BETWEEN FRAME LN. | 8 AND FRAME LN. | 9 |

BUILDING LENGTH IS 210' 0 0/16"

PURLIN AND GIRT DATA FOLLOWS:

RIGHT ENDWALL GIRT DATA - DIMENSION FROM BLDG. LINE TO OUTSIDE COLUMN FACE IS 0' 8 1/ 2"
MAXIMUM GIRT SPACING IS 8' 0 0/16"
RIGHT ENDWALL GIRT SPACINGS (FROM BASE)
C 7' 2 1/ 4", Z 5' 0 0/16", Z 5' 0 0/16", Z 5' 0 0/16", Z 5' 3 1/ 4",

BACK SLOPE PURLIN DATA - DIMENSION FROM BLDG. LN. TO EAVE PURLIN IS 0' 3 7/16"
DIMENSION FROM EAVE PURLIN TO FIRST INTERIOR PURLIN IS 4' 1 5/ 8"
SECOND PURLIN SPACE IS 4' 1 5/ 8"
18 PURLIN SPACES AT 5' 0 0/16"
RIDGE SPACE IS 1' 6 0/16"

FRONT SLOPE PURLIN DATA - DIMENSION FROM BLDG. LN. TO EAVE PURLIN IS 0' 3 7/16"
DIMENSION FROM EAVE PURLIN TO FIRST INTERIOR PURLIN IS 4' 1 5/ 8"
SECOND PURLIN SPACE IS 4' 1 5/ 8"
18 PURLIN SPACES AT 5' 0 0/16"
RIDGE SPACE IS 1' 6 0/16"

SPECIAL FRAME DATA FOR THE 7 FRAME FOLLOWS:

SYMMETRY = 2 1=YES
2=NO

DEF CODE = 0 1=MIN.
2=MAX.
3=INT.

AVG BAY SPACE 12.50'

SHAPE CODE = 2 1=RF SELECTED BY PROGRAM
2=CB SELECTED BY PROGRAM
3=SP SPECIAL FRAME INPUT

| | |
|---|---|
| NUMBER OF SUPPORTED POINTS | 13 |
| NUMBER OF SPECIAL MEMBER RELEASES | 0 |
| NUMBER OF INTERIOR COLUMNS | 10 |
| NUMBER OF MEMBERS | 42 |
| NUMBER OF CENTER LINE JOINT POINTS | 43 |

DESIGN CODE = 1 1=YS AUTO-DESIGN FRAME
2=HD HOLD DEPTHS & DESIGN
3=SC STRESS CHECK FRAME

LOADING:

| | |
|---|---|
| | 3.00 ADDITIONAL DEAD LOAD |
| | 2.00 PURLINS & SHEETING |
| | 2.64 FRAME DEAD LOAD |
| TOTAL DEAD | 7.64 PSF |
| LIVE | 25.00 PSF |
| WIND | 20.54 PSF |
| SNOW | 20.00 PSF |

THIS FRAME REQUIRED ON FRAME LINES : 9

MEMBER DATA:

| MEM | FLANGE TK | FLANGE WIDTH | WEB TK | GAGE | DEPTH | LENGTH (FT) | AREA (IN2) | SX (IN3) | RX (IN) | RY (IN) | YIELD(KSI) FLG | YIELD(KSI) WEB | KLXX (FT) | KLYY (FT) | LB (FT) | SPLICE CODES J1 | SPLICE CODES J2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FRAME SIDE 1 | | | | | | | | | | | | | | | | | |
| 1 | | | | 13 | 8.50 | 28.320 | 2.58 | 6.36 | 3.24 | 1.09 | 50.0 | 50.0 | 27.60 | SET BY P&G SPACE | | BP | KN |
| FRAME SIDE 2 | | | | | | | | | | | | | | | | | |
| 2 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.899 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 7.11 | SET BY P&G SPACE | | KN | SS |
| 3 | 3/16 | 5.0 | 1/8 | | 9.00 | 4.243 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 7.11 | SET BY P&G SPACE | | SS | SS |
| LOCATION OF END POST MEMBER NO. 33 LOCATED AT 8' 6 0/16" | | | | | | | | | | | | | | | | | |
| 4 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.656 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| 5 | 3/16 | 5.0 | 1/8 | | 9.00 | 10.017 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 6 | 3/16 | 5.0 | 1/8 | | 9.00 | 6.511 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| LOCATION OF END POST MEMBER NO. 34 LOCATED AT 28' 6 0/16" | | | | | | | | | | | | | | | | | |
| 7 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.489 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| 8 | 3/16 | 5.0 | 1/8 | | 9.00 | 10.017 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 9 | 3/16 | 5.0 | 1/8 | | 9.00 | 6.511 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| LOCATION OF END POST MEMBER NO. 35 LOCATED AT 48' 6 0/16" | | | | | | | | | | | | | | | | | |
| 10 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.489 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| 11 | 3/16 | 5.0 | 1/8 | | 9.00 | 10.017 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 12 | 3/16 | 5.0 | 1/8 | | 9.00 | 6.553 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| LOCATION OF END POST MEMBER NO. 36 LOCATED AT 68' 6 0/16" | | | | | | | | | | | | | | | | | |
| 13 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.447 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| 14 | 3/16 | 6.0 | 1/8 | | 9.00 | 10.017 | 3.41 | 11.31 | 3.86 | 1.41 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 15 | 3/16 | 6.0 | 1/8 | | 9.00 | 6.678 | 3.41 | 11.31 | 3.86 | 1.41 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| LOCATION OF END POST MEMBER NO. 37 LOCATED AT 88' 6 0/16" | | | | | | | | | | | | | | | | | |
| 16 | 3/16 | 6.0 | 1/8 | | 9.00 | 10.832 | 3.41 | 11.31 | 3.86 | 1.41 | 50.0 | 42.0 | 11.51 | SET BY P&G SPACE | | SS | SP |
| FRAME SIDE 3 | | | | | | | | | | | | | | | | | |
| 17 | 3/16 | 5.0 | 1/8 | | 9.00 | 12.014 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 16.01 | SET BY P&G SPACE | | SS | SP |
| 18 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.406 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 16.01 | SET BY P&G SPACE | | SS | SS |
| LOCATION OF END POST MEMBER NO. 38 LOCATED AT 116' 0 0/16" | | | | | | | | | | | | | | | | | |
| 19 | 3/16 | 5.0 | 1/8 | | 9.00 | 8.351 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 15.51 | SET BY P&G SPACE | | SP | SS |
| 20 | 3/16 | 5.0 | 1/8 | | 9.00 | 7.246 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 15.51 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF END POST MEMBER NO. 39 LOCATED AT 131' 6 0/16" | | | | | | | | | | | | | | | | | |
| 21 | 3/16 | 5.0 | 1/8 | | 9.00 | 6.511 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| 22 | 3/16 | 5.0 | 1/8 | | 9.00 | 10.017 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 23 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.489 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF END POST MEMBER NO. 40 LOCATED AT 151' 6 0/16" | | | | | | | | | | | | | | | | | |
| 24 | 3/16 | 5.0 | 1/8 | | 9.00 | 6.511 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| 25 | 3/16 | 5.0 | 1/8 | | 9.00 | 10.017 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 26 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.489 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF END POST MEMBER NO. 41 LOCATED AT 171' 6 0/16" | | | | | | | | | | | | | | | | | |
| 27 | 3/16 | 5.0 | 1/8 | | 9.00 | 6.511 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SS |
| 28 | 3/16 | 5.0 | 1/8 | | 9.00 | 10.017 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SP | SS |
| 29 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.656 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 20.02 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF END POST MEMBER NO. 42 LOCATED AT 191' 6 0/16" | | | | | | | | | | | | | | | | | |
| 30 | 3/16 | 5.0 | 1/8 | | 9.00 | 4.243 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 7.10 | SET BY P&G SPACE | | SS | SS |
| 31 | 3/16 | 5.0 | 1/8 | | 9.00 | 3.899 | 3.04 | 9.69 | 3.79 | 1.13 | 50.0 | 42.0 | 7.10 | SET BY P&G SPACE | | KN | SS |
| FRAME SIDE 4 | | | | | | | | | | | | | | | | | |
| 32 | | | | 13 | 8.50 | 28.320 | 2.58 | 6.36 | 3.24 | 1.09 | 50.0 | 50.0 | 27.60 | SET BY P&G SPACE | | BP | KN |
| END POSTS FRAME SIDES 5, 6 AND 7 FOLLOW: | | | | | | | | | | | | | | | | | |
| FRAME SIDE 5 | | | | | | | | | | | | | | | | | |
| 33 | 3/16 | 6.0 | 1/8 | | 9.00 | 27.694 | 3.41 | 11.31 | 3.86 | 1.41 | 50.0 | 42.0 | 27.89 | SET BY P&G SPACE | | BP | SP |
| 34 | 3/16 | 6.0 | 1/8 | | 13.00 | 28.728 | 3.95 | 17.68 | 5.39 | 1.31 | 50.0 | 42.0 | 28.73 | SET BY P&G SPACE | | BP | SP |
| 35 | 3/16 | 6.0 | 1/8 | | 13.00 | 29.561 | 3.95 | 17.68 | 5.39 | 1.31 | 50.0 | 42.0 | 29.56 | SET BY P&G SPACE | | BP | SP |
| 36 | 3/16 | 6.0 | 1/8 | | 14.00 | 30.394 | 4.08 | 19.38 | 5.76 | 1.29 | 50.0 | 42.0 | 30.39 | SET BY P&G SPACE | | BP | SP |
| 37 | 3/16 | 6.0 | 1/8 | | 17.00 | 31.228 | 4.49 | 24.77 | 6.85 | 1.23 | 50.0 | 42.0 | 31.23 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 6 | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | 3/16 | 6.0 | 1/ 8 | 15.00 | 31.040 | 4.22 | 21.13 | 6.13 | 1.27 | 50.0 | 42.0 | 31.04 | SET BY P&G SPACE | BP | SP |
| 39 | 3/16 | 6.0 | 1/ 8 | 13.00 | 30.394 | 3.95 | 17.68 | 5.39 | 1.31 | 50.0 | 42.0 | 30.39 | SET BY P&G SPACE | BP | SP |
| 40 | 3/16 | 6.0 | 1/ 8 | 13.00 | 29.561 | 3.95 | 17.68 | 5.39 | 1.31 | 50.0 | 42.0 | 29.56 | SET BY P&G SPACE | BP | SP |
| 41 | 3/16 | 6.0 | 1/ 8 | 13.00 | 28.728 | 3.95 | 17.68 | 5.39 | 1.31 | 50.0 | 42.0 | 28.73 | SET BY P&G SPACE | BP | SP |
| 42 | 3/16 | 6.0 | 1/ 8 | 9.00 | 27.894 | 3.41 | 11.31 | 3.86 | 1.41 | 50.0 | 42.0 | 27.89 | SET BY P&G SPACE | BP | SP |

END POST SPACING AND LOCATION FROM BACK BUILDING LINE

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SPACING | 8' | 6 | 0/16" | LOCATION | 8' | 6 | 0/16" | | ELEVATION | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 28' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 48' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 68' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 88' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 27' | 6 | 0/16" | LOCATION | 116' | 0 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 15' | 6 | 0/16" | LOCATION | 131' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 151' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 171' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 20' | 0 | 0/16" | LOCATION | 191' | 6 | 0/16" | | | 0' | 0 | 0/16" |
| SPACING | 8' | 6 | 0/16" | LOCATION | 200' | 0 | 0/16" | = SPAN | | | | |

BACK CORNER POST ORIENTATION = CP
FRONT CORNER POST ORIENTATION = CP

SUMMARY OF REACTIONS:

| SIDE | LOAD COMBINATION | HORIZONTAL | VERTICAL | MOMENT | |
|---|---|---|---|---|---|
| BACK | 1, 3, 0, 0, 0 | -0.00 | 0.81 | 0.0 | |
| FRONT | 1, 3, 0, 0, 0 | -0.00 | 0.80 | 0.0 | |
| ENDPOST # 1 | 1, 3, 0, 0, 0 | -0.00 | 6.68 | 0.0 | AT 8.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 2 | 1, 3, 0, 0, 0 | -0.00 | 8.31 | 0.0 | AT 28.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 3 | 1, 3, 0, 0, 0 | -0.00 | 8.24 | 0.0 | AT 48.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 4 | 1, 3, 0, 0, 0 | -0.00 | 7.41 | 0.0 | AT 68.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 5 | 1, 3, 0, 0, 0 | -0.00 | 10.35 | 0.0 | AT 88.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 6 | 1, 3, 0, 0, 0 | -0.00 | 9.32 | 0.0 | AT 116.00 FT FROM BACK BLDG. LN. |
| ENDPOST # 7 | 1, 3, 0, 0, 0 | -0.00 | 6.26 | 0.0 | AT 131.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 8 | 1, 3, 0, 0, 0 | -0.00 | 8.44 | 0.0 | AT 151.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 9 | 1, 3, 0, 0, 0 | -0.00 | 8.26 | 0.0 | AT 171.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 10 | 1, 3, 0, 0, 0 | -0.00 | 6.70 | 0.0 | AT 191.50 FT FROM BACK BLDG. LN. |
| BACK | 1,11,41, 0, 0 | -1.79 | 0.02 | 0.0 | |
| FRONT | 1,11,41, 0, 0 | -2.51 | 0.16 | 0.0 | |
| ENDPOST # 1 | 1,11,41, 0, 0 | -4.13 | -4.43 | 0.0 | AT 8.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 2 | 1,11,41, 0, 0 | -5.92 | -5.52 | 0.0 | AT 28.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 3 | 1,11,41, 0, 0 | -6.09 | -5.38 | 0.0 | AT 48.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 4 | 1,11,41, 0, 0 | -6.26 | -4.98 | 0.0 | AT 68.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 5 | 1,11,41, 0, 0 | -7.63 | -6.20 | 0.0 | AT 88.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 6 | 1,11,41, 0, 0 | -6.87 | -3.03 | 0.0 | AT 116.00 FT FROM BACK BLDG. LN. |
| ENDPOST # 7 | 1,11,41, 0, 0 | -5.55 | -1.44 | 0.0 | AT 131.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 8 | 1,11,41, 0, 0 | -6.09 | -2.39 | 0.0 | AT 151.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 9 | 1,11,41, 0, 0 | -5.92 | -2.31 | 0.0 | AT 171.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 10 | 1,11,41, 0, 0 | -4.13 | -1.89 | 0.0 | AT 191.50 FT FROM BACK BLDG. LN. |
| BACK | 1,23,41, 0, 0 | 2.51 | 0.16 | 0.0 | |
| FRONT | 1,23,41, 0, 0 | 1.79 | 0.03 | 0.0 | |
| ENDPOST # 1 | 1,23,41, 0, 0 | -4.13 | -1.88 | 0.0 | AT 8.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 2 | 1,23,41, 0, 0 | -5.92 | -2.31 | 0.0 | AT 28.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 3 | 1,23,41, 0, 0 | -6.09 | -2.37 | 0.0 | AT 48.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 4 | 1,23,41, 0, 0 | -6.26 | -1.68 | 0.0 | AT 68.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 5 | 1,23,41, 0, 0 | -7.63 | -3.88 | 0.0 | AT 88.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 6 | 1,23,41, 0, 0 | -6.87 | -5.96 | 0.0 | AT 116.00 FT FROM BACK BLDG. LN. |
| ENDPOST # 7 | 1,23,41, 0, 0 | -5.55 | -4.01 | 0.0 | AT 131.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 8 | 1,23,41, 0, 0 | -6.09 | -5.57 | 0.0 | AT 151.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 9 | 1,23,41, 0, 0 | -5.92 | -5.47 | 0.0 | AT 171.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 10 | 1,23,41, 0, 0 | -4.13 | -4.45 | 0.0 | AT 191.50 FT FROM BACK BLDG. LN. |

SUMMARY OF REACTIONS:

| SIDE | LOAD COMBINATION | HORIZONTAL | VERTICAL | MOMENT | |
|---|---|---|---|---|---|
| BACK | 1, 3,11,41, 0 | -1.79 | 0.49 | 0.0 | |
| FRONT | 1, 3,11,41, 0 | -2.51 | 0.63 | 0.0 | |
| ENDPOST # 1 | 1, 3,11,41, 0 | -4.13 | 0.72 | 0.0 | AT 8.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 2 | 1, 3,11,41, 0 | -5.92 | 0.90 | 0.0 | AT 28.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 3 | 1, 3,11,41, 0 | -6.09 | 0.97 | 0.0 | AT 48.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 4 | 1, 3,11,41, 0 | -6.26 | 0.68 | 0.0 | AT 68.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 5 | 1, 3,11,41, 0 | -7.63 | 1.79 | 0.0 | AT 88.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 6 | 1, 3,11,41, 0 | -6.87 | 4.16 | 0.0 | AT 116.00 FT FROM BACK BLDG. LN. |
| ENDPOST # 7 | 1, 3,11,41, 0 | -5.55 | 3.30 | 0.0 | AT 131.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 8 | 1, 3,11,41, 0 | -6.09 | 4.12 | 0.0 | AT 151.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 9 | 1, 3,11,41, 0 | -5.92 | 4.07 | 0.0 | AT 171.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 10 | 1, 3,11,41, 0 | -4.13 | 3.28 | 0.0 | AT 191.50 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,23,41, 0 | 2.51 | 0.63 | 0.0 | |
| FRONT | 1, 3,23,41, 0 | 1.79 | 0.49 | 0.0 | |
| ENDPOST # 1 | 1, 3,23,41, 0 | -4.13 | 3.27 | 0.0 | AT 8.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 2 | 1, 3,23,41, 0 | -5.92 | 4.11 | 0.0 | AT 28.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 3 | 1, 3,23,41, 0 | -6.09 | 3.99 | 0.0 | AT 48.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 4 | 1, 3,23,41, 0 | -6.26 | 3.98 | 0.0 | AT 68.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 5 | 1, 3,23,41, 0 | -7.63 | 4.12 | 0.0 | AT 88.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 6 | 1, 3,23,41, 0 | -6.87 | 1.23 | 0.0 | AT 116.00 FT FROM BACK BLDG. LN. |
| ENDPOST # 7 | 1, 3,23,41, 0 | -5.55 | 0.73 | 0.0 | AT 131.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 8 | 1, 3,23,41, 0 | -6.09 | 0.95 | 0.0 | AT 151.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 9 | 1, 3,23,41, 0 | -5.92 | 0.91 | 0.0 | AT 171.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 10 | 1, 3,23,41, 0 | -4.13 | 0.72 | 0.0 | AT 191.50 FT FROM BACK BLDG. LN. |
| BACK | 1,15,18, 0, 0 | -0.00 | 0.72 | 0.0 | |
| FRONT | 1,15,18, 0, 0 | -0.00 | 0.52 | 0.0 | |
| ENDPOST # 1 | 1,15,18, 0, 0 | -0.00 | 5.65 | 0.0 | AT 8.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 2 | 1,15,18, 0, 0 | -0.00 | 7.04 | 0.0 | AT 28.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 3 | 1,15,18, 0, 0 | -0.00 | 6.92 | 0.0 | AT 48.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 4 | 1,15,18, 0, 0 | -0.00 | 6.48 | 0.0 | AT 68.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 5 | 1,15,18, 0, 0 | -0.00 | 8.09 | 0.0 | AT 88.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 6 | 1,15,18, 0, 0 | -0.00 | 5.26 | 0.0 | AT 116.00 FT FROM BACK BLDG. LN. |
| ENDPOST # 7 | 1,15,18, 0, 0 | -0.00 | 3.32 | 0.0 | AT 131.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 8 | 1,15,18, 0, 0 | -0.00 | 4.55 | 0.0 | AT 151.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 9 | 1,15,18, 0, 0 | -0.00 | 4.43 | 0.0 | AT 171.50 FT FROM BACK BLDG. LN. |
| ENDPOST # 10 | 1,15,18, 0, 0 | -0.00 | 3.61 | 0.0 | AT 191.50 FT FROM BACK BLDG. LN. |

SUMMARY OF REACTIONS:

| SIDE | LOAD COMBINATION | HORIZONTAL | VERTICAL | MOMENT |
|---|---|---|---|---|

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA ------> MARK NO. | WIDTH | | TK | | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE | BLR | WELDING PATTERN |
|---|---|---|---|---|---|---|---|---|---|---|
| BACK | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 | 0.0 | OS-3 |
| FRONT | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 | 0.0 | OS-3 |
| ENDPOST # 1 | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 | 4.40 | OS-3 |
| ENDPOST # 2 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 | 2.74 | OS-3 |
| ENDPOST # 3 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 | 2.67 | OS-3 |
| ENDPOST # 4 | BP-B08315 | 8.00 | X | 3/8 | X | 15.00 | (4) | 3/4 DIA. A36 | 2.47 | OS-3 |
| ENDPOST # 5 | BP-B08318 | 8.00 | X | 3/8 | X | 18.00 | (4) | 3/4 DIA. A36 | 3.08 | OS-3 |
| ENDPOST # 6 | BP-B08316 | 8.00 | X | 3/8 | X | 16.00 | (4) | 3/4 DIA. A36 | 2.96 | OS-3 |
| ENDPOST # 7 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 | 1.99 | OS-3 |
| ENDPOST # 8 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 | 2.76 | OS-3 |
| ENDPOST # 9 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 | 2.72 | OS-3 |
| ENDPOST # 10 | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 | 4.42 | OS-3 |

WEB STIFFENER REQUIREMENTS:

| MEMBER | STIFFENER NUMBER | DESCRIPTION | LOCATION (FT) | WEB DEPTH (IN) | H/T RATIO | A/H RATIO | A (IN) | STIFFENER SIZE TK | | | WIDTH | SIDES | WELDING L - S | DETAIL ? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 1 | BEARING (ENDPOST) | 1.01 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 3 | 1 | BEARING (ENDPOST) | 3.87 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 6 | 1 | BEARING (ENDPOST) | 5.97 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 9 | 1 | BEARING (ENDPOST) | 5.97 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 12 | 1 | BEARING (ENDPOST) | 5.97 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 15 | 1 | BEARING (ENDPOST) | 5.97 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 31 | 1 | BEARING (ENDPOST) | 1.01 | 8.625 | | | | 3/ 8 | X | 2 | 7/ 8 | BOTH | STD. CK-OK | YES |
| 30 | 1 | BEARING (ENDPOST) | 3.87 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 27 | 1 | BEARING (ENDPOST) | 5.97 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 24 | 1 | BEARING (ENDPOST) | 5.97 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 21 | 1 | BEARING (ENDPOST) | 5.97 | 8.626 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |
| 19 | 2 | BEARING (ENDPOST) | 7.73 | 8.625 | | | | 3/ 8 | X | 2 | 3/ 8 | BOTH | STD. CK-OK | YES |

BOLTED CONNECTION DATA:

| MEMBER # | J # | PLATE DATA TK | WD | LENGTH | BOLT DATA SIZE | OUTSIDE #ROWS | OUTSIDE 4-BOLT | INSIDE #ROWS | INSIDE 4-BOLT | TYPE | MARK # | CONNECTION CAPACITY OUTSIDE | INSIDE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3/ 8 X | 6.0 X | 0'- 9 1/ 2 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06309411 | 84.0 "K | 84.0 "K |
| 4 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 5 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 7 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 8 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 10 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 11 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 13 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 14 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 16 | 2 | 4/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06410011 | 194.0 "K | 194.0 "K |
| 17 | 2 | 4/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06410011 | 194.0 "K | 194.0 "K |
| 19 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 20 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 22 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 23 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 25 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 26 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 28 | 1 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 29 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B06310011 | 109.0 "K | 109.0 "K |
| 32 | 2 | 3/ 8 X | 6.0 X | 0'- 9 1/ 2 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06309411 | 84.0 "K | 84.0 "K |
| INTERIOR I COLUMN CONNECTION PLATES | | | | | | | | | | | | | |
| 33 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06310011 | 92.0 "K | 92.0 "K |
| 34 | 2 | 3/ 8 X | 6.0 X | 1'- 2 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06314011 | 145.9 "K | 145.9 "K |
| 35 | 2 | 3/ 8 X | 6.0 X | 1'- 2 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06314011 | 145.9 "K | 145.9 "K |
| 36 | 2 | 3/ 8 X | 6.0 X | 1'- 3 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06315011 | 159.4 "K | 159.4 "K |
| 37 | 2 | 3/ 8 X | 6.0 X | 1'- 6 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06318011 | 215.8 "K | 215.8 "K |
| 38 | 2 | 3/ 8 X | 6.0 X | 1'- 4 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06316011 | 172.9 "K | 172.9 "K |
| 39 | 2 | 3/ 8 X | 6.0 X | 1'- 2 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06314011 | 145.9 "K | 145.9 "K |
| 40 | 2 | 3/ 8 X | 6.0 X | 1'- 2 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06314011 | 145.9 "K | 145.9 "K |
| 41 | 2 | 3/ 8 X | 6.0 X | 1'- 2 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06314011 | 145.9 "K | 145.9 "K |
| 42 | 2 | 3/ 8 X | 6.0 X | 0'-10 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B06310011 | 92.0 "K | 92.0 "K |

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 16 | 16 | 15 | 15 | 14 | 14 | 12 |
| LOCATION | 1'- 6 0/16 | 6'- 6 0/16 | 11'- 6 0/16 | 16'- 6 0/16 | 21'- 6 0/16 | 26'- 6 0/16 | 31'- 6 0/16 |
| DEPTH @ FB | 8.9997 | 8.9997 | 0.0 | 9.0000 | 9.0000 | 9.0000 | 0.0 |
| FB MARK # | GFB2010 | NOT REQ D | NOT REQ D | GFB2010 | NOT REQ D | GFB2010 | NOT REQ D |

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 12 | 11 | 11 | 9 | 9 | 8 | 8 |
| LOCATION | 36'- 6 0/16 | 41'- 6 0/16 | 46'- 6 0/16 | 51'- 6 0/16 | 56'- 6 0/16 | 61'- 6 0/16 | 66'- 6 0/16 |
| DEPTH @ FB | 9.0000 | 8.9997 | 9.0000 | 0.0 | 9.0000 | 9.0000 | 9.0000 |
| FB MARK # | NOT REQ D | GFB2010 | NOT REQ D | NOT REQ D | GFB2010 | NOT REQ D | GFB2010 |

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 6 | 6 | 5 | 5 | 3 | 2 | 2 |
| LOCATION | 71'- 6 0/16 | 76'- 6 0/16 | 81'- 6 0/16 | 86'- 6 0/16 | 91'- 6 0/16 | 95'- 7 5/ 8 | 99'- 9 1/ 4 |
| DEPTH @ FB | 0.0 | 9.0000 | 9.0000 | 9.0000 | 0.0 | 0.0 | 0.0 |
| FB MARK # | NOT REQ D | NOT REQ D | GFB2010 | GFB2010 | NOT REQ D | NOT REQ D | NOT REQ D |

BACK SIDE OF FRAME BASE TO EAVE:

| | | | | |
|---|---|---|---|---|
| MEMBER # | 1 | 1 | 1 | 1 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 |
| DEPTH @ FB | 8.5000 | 8.5000 | 8.5000 | 8.5000 |
| FB MARK # | NOT REQ D* | NOT REQ D* | NOT REQ D* | NOT REQ D* |

FRONT SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 17 | 17 | 17 | 19 | 19 | 20 | 21 |
| LOCATION | 1'- 6 0/16 | 6'- 6 0/16 | 11'- 6 0/16 | 16'- 6 0/16 | 21'- 6 0/16 | 26'- 6 0/16 | 31'- 6 0/16 |
| DEPTH @ FB | 9.0000 | 9.0000 | 8.9997 | 9.0000 | 8.9997 | 9.0002 | 0.0 |
| FB MARK # | GFB2010 | GFB2010 | NOT REQ D | GFB2010 | GFB2010 | GFB2010 | NOT REQ D |

FRONT SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 21 | 22 | 22 | 24 | 24 | 25 | 25 |
| LOCATION | 36'- 6 0/16 | 41'- 6 0/16 | 46'- 6 0/16 | 51'- 6 0/16 | 56'- 6 0/16 | 61'- 6 0/16 | 66'- 6 0/16 |
| DEPTH @ FB | 8.9995 | 9.0000 | 9.0000 | 0.0 | 9.0000 | 8.9997 | 8.9997 |
| FB MARK # | NOT REQ D | GFB2010 | NOT REQ D | NOT REQ D | GFB2010 | NOT REQ D | GFB2010 |

FRONT SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 27 | 27 | 28 | 28 | 30 | 31 | 31 |
| LOCATION | 71'- 6 0/16 | 76'- 6 0/16 | 81'- 6 0/16 | 86'- 6 0/16 | 91'- 6 0/16 | 95'- 7 5/ 8 | 99'- 9 1/ 4 |
| DEPTH @ FB | 0.0 | 9.0000 | 9.0000 | 9.0002 | 0.0 | 0.0 | 0.0 |
| FB MARK # | NOT REQ D | NOT REQ D | GFB2010 | GFB2010 | NOT REQ D | NOT REQ D | NOT REQ D |

FRONT SIDE OF FRAME BASE TO EAVE:

| | | | | |
|---|---|---|---|---|
| MEMBER # | 32 | 32 | 32 | 32 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 |
| DEPTH @ FB | 8.4998 | 8.4998 | 8.4998 | 8.4998 |
| FB MARK # | NOT REQ D* | NOT REQ D* | NOT REQ D* | NOT REQ D* |

FLANGE BRACING REQUIREMENTS:

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 33 | 33 | 33 | 33 | 33 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 9.0000 | 0.0 | 9.0000 | 0.0 | 0.0 |
| FB MARK # | GFB2064 | NOT REQ D | GFB2064 | NOT REQ D | NOT REQ D |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 34 | 34 | 34 | 34 | 34 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 13.0000 | 0.0 | 13.0000 | 0.0 | 13.0000 |
| FB MARK # | GFB2080 | NOT REQ D | GFB2080 | NOT REQ D | GFB2080 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 35 | 35 | 35 | 35 | 35 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 13.0000 | 0.0 | 13.0000 | 0.0 | 13.0000 |
| FB MARK # | GFB2080 | NOT REQ D | GFB2080 | NOT REQ D | GFB2080 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 36 | 36 | 36 | 36 | 36 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 14.0000 | 0.0 | 14.0000 | 0.0 | 14.0000 |
| FB MARK # | GFB2090 | NOT REQ D | GFB2090 | NOT REQ D | GFB2090 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 37 | 37 | 37 | 37 | 37 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 17.0000 | 0.0 | 17.0000 | 0.0 | 17.0000 |
| FB MARK # | GFB2104 | NOT REQ D | GFB2104 | NOT REQ D | GFB2104 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 38 | 38 | 38 | 38 | 38 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 15.0000 | 0.0 | 15.0000 | 0.0 | 15.0000 |
| FB MARK # | GFB2094 | NOT REQ D | GFB2094 | NOT REQ D | GFB2094 |

FLANGE BRACING REQUIREMENTS:

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 39 | 39 | 39 | 39 | 39 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 13.0000 | 0.0 | 13.0000 | 0.0 | 13.0000 |
| FB MARK # | GFB2080 | NOT REQ D | GFB2080 | NOT REQ D | GFB2080 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 40 | 40 | 40 | 40 | 40 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 13.0000 | 0.0 | 13.0000 | 0.0 | 13.0000 |
| FB MARK # | GFB2080 | NOT REQ D | GFB2080 | NOT REQ D | GFB2080 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 41 | 41 | 41 | 41 | 41 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 13.0000 | 0.0 | 13.0000 | 0.0 | 13.0000 |
| FB MARK # | GFB2080 | NOT REQ D | GFB2080 | NOT REQ D | GFB2080 |

END POST BASE TO RAKE BEAM:

| | | | | | |
|---|---|---|---|---|---|
| MEMBER # | 42 | 42 | 42 | 42 | 42 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 | 27'- 2 1/ 4 |
| DEPTH @ FB | 9.0000 | 0.0 | 9.0000 | 0.0 | 0.0 |
| FB MARK # | GFB2064 | NOT REQ D | GFB2064 | NOT REQ D | NOT REQ D |

* - FLANGE BRACE REMOVED DUE TO SHALLOW DEPTH

SPAN = 200'-0
BACK SIDEWALL HEIGHT = 29'-0
FRONT SIDEWALL HEIGHT = 29'-0
BUILDING LENGTH = 210'-0

RIDGE FROM BACK BLDG LN= 100'-0
ELEVATION OF FRONT COL =
BACK ROOF PITCH = 0.5000 : 12
FRONT ROOF PITCH = 0.5000 : 12

THIS FRAME REQUIRED ON FRAME LINES : 9,

BAY SPACING = 12.50 FT.

LOADING: ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF (PURLINS & SHEETING) + FRAME WEIGHT = 7.64 PSF)
LIVE = 25.00 PSF
WIND = 20.54 PSF
SNOW = 20.00 PSF

THE ABOVE LOADS COMBINED WITH ANY SPECIAL LOADS APPEAR IN 6 LOAD CASES AS DESCRIBED BELOW:

| LOAD CODES | DESCRIPTION | | | STRESS FACTORS |
|---|---|---|---|---|
| 1, 3, 0, 0, 0 DEAD LOAD | + LIVE LOAD + | | + | 1.00 |
| 1,11,41, 0, 0 DEAD LOAD | + MBMA WIND BACK 1981 + | MBMA EP SUCTION + | + | 1.33 |
| 1,23,41, 0, 0 DEAD LOAD | + MBMA WIND FRONT 1981+ | MBMA EP SUCTION + | + | 1.33 |
| 1, 3,11,41, 0 DEAD LOAD | + LIVE LOAD + | MBMA WIND BACK 1981 + | MBMA EP SUCTION + | 1.33 |
| 1, 3,23,41, 0 DEAD LOAD | + LIVE LOAD + | MBMA WIND FRONT 1981+ | MBMA EP SUCTION + | 1.33 |
| 1,15,18, 0, 0 DEAD LOAD | + SNOW BACK TO RIDGE + | 1/2 SNOW FRT TO RIDG+ | + | 1.00 |

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| BACK SW COL | 1, 3, 0, 0, 0 | - | - | - | 0.81 | 0.0 |
| | 1,11,41, 0, 0 | 1.79 | - | - | 0.02 | 0.0 |
| | 1,23,41, 0, 0 | - | 2.51 | - | 0.16 | 0.0 |
| | 1, 3,11,41, 0 | 1.79 | - | - | 0.49 | 0.0 |
| | 1, 3,23,41, 0 | - | 2.51 | - | 0.63 | 0.0 |
| | 1,15,18, 0, 0 | - | - | - | 0.72 | 0.0 |
| FRONT SW COL | 1, 3, 0, 0, 0 | - | - | - | 0.80 | 0.0 |
| | 1,11,41, 0, 0 | - | 2.51 | - | 0.16 | 0.0 |
| | 1,23,41, 0, 0 | 1.79 | - | - | 0.03 | 0.0 |
| | 1, 3,11,41, 0 | - | 2.51 | - | 0.63 | 0.0 |
| | 1, 3,23,41, 0 | 1.79 | - | - | 0.49 | 0.0 |
| | 1,15,18, 0, 0 | - | - | - | 0.52 | 0.0 |
| ENDPOST # 1 | 1, 3, 0, 0, 0 | - | - | - | 6.68 | 0.0 AT 8.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 4.13 | 4.13 | 4.43 | - | 0.0 |
| | 1,23,41, 0, 0 | 4.13 | 4.13 | 1.88 | - | 0.0 |
| | 1, 3,11,41, 0 | 4.13 | 4.13 | - | 0.72 | 0.0 |
| | 1, 3,23,41, 0 | 4.13 | 4.13 | - | 3.27 | 0.0 |
| | 1,15,18, 0, 0 | - | - | - | 5.65 | 0.0 |

BAY SPACING = 12.50 FT.

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) | |
|---|---|---|---|---|---|---|---|
| ENDPOST # 2 | 1, 3, 0, 0, 0 | - | - | - | 8.31 | 0.0 | AT 28.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 5.92 | 5.92 | 5.52 | - | 0.0 | |
| | 1,23,41, 0, 0 | 5.92 | 5.92 | 2.31 | - | 0.0 | |
| | 1, 3,11,41, 0 | 5.92 | 5.92 | - | 0.99 | 0.0 | |
| | 1, 3,23,41, 0 | 5.92 | 5.92 | - | 4.11 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 7.04 | 0.0 | |
| ENDPOST # 3 | 1, 3, 0, 0, 0 | - | - | - | 8.24 | 0.0 | AT 48.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 6.09 | 6.09 | 5.38 | - | 0.0 | |
| | 1,23,41, 0, 0 | 6.09 | 6.09 | 2.37 | - | 0.0 | |
| | 1, 3,11,41, 0 | 6.09 | 6.09 | - | 0.97 | 0.0 | |
| | 1, 3,23,41, 0 | 6.09 | 6.09 | - | 3.99 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 6.92 | 0.0 | |
| ENDPOST # 4 | 1, 3, 0, 0, 0 | - | - | - | 7.41 | 0.0 | AT 68.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 6.26 | 6.26 | 4.98 | - | 0.0 | |
| | 1,23,41, 0, 0 | 6.26 | 6.26 | 1.68 | - | 0.0 | |
| | 1, 3,11,41, 0 | 6.26 | 6.26 | - | 0.68 | 0.0 | |
| | 1, 3,23,41, 0 | 6.26 | 6.26 | - | 3.98 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 6.48 | 0.0 | |
| ENDPOST # 5 | 1, 3, 0, 0, 0 | - | - | - | 10.35 | 0.0 | AT 88.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 7.63 | 7.63 | 6.20 | - | 0.0 | |
| | 1,23,41, 0, 0 | 7.63 | 7.63 | 3.88 | - | 0.0 | |
| | 1, 3,11,41, 0 | 7.63 | 7.63 | - | 1.79 | 0.0 | |
| | 1, 3,23,41, 0 | 7.63 | 7.63 | - | 4.12 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 8.09 | 0.0 | |
| ENDPOST # 6 | 1, 3, 0, 0, 0 | - | - | - | 9.32 | 0.0 | AT 116.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 6.87 | 6.87 | 3.03 | - | 0.0 | |
| | 1,23,41, 0, 0 | 6.87 | 6.87 | 5.96 | - | 0.0 | |
| | 1, 3,11,41, 0 | 6.87 | 6.87 | - | 4.16 | 0.0 | |
| | 1, 3,23,41, 0 | 6.87 | 6.87 | - | 1.23 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 5.26 | 0.0 | |
| ENDPOST # 7 | 1, 3, 0, 0, 0 | - | - | - | 6.26 | 0.0 | AT 131.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 5.55 | 5.55 | 1.44 | - | 0.0 | |
| | 1,23,41, 0, 0 | 5.55 | 5.55 | 4.01 | - | 0.0 | |
| | 1, 3,11,41, 0 | 5.55 | 5.55 | - | 3.30 | 0.0 | |
| | 1, 3,23,41, 0 | 5.55 | 5.55 | - | 0.73 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 3.32 | 0.0 | |
| ENDPOST # 8 | 1, 3, 0, 0, 0 | - | - | - | 8.44 | 0.0 | AT 151.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 6.09 | 6.09 | 2.39 | - | 0.0 | |
| | 1,23,41, 0, 0 | 6.09 | 6.09 | 5.57 | - | 0.0 | |
| | 1, 3,11,41, 0 | 6.09 | 6.09 | - | 4.12 | 0.0 | |
| | 1, 3,23,41, 0 | 6.09 | 6.09 | - | 0.95 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 4.55 | 0.0 | |

BAY SPACING = 12.50 FT.

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) | |
|---|---|---|---|---|---|---|---|
| ENDPOST # 9 | 1, 3, 0, 0, 0 | - | - | - | 8.26 | 0.0 | AT 171.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 5.92 | 5.92 | 2.31 | - | 0.0 | |
| | 1,23,41, 0, 0 | 5.92 | 5.92 | 5.47 | - | 0.0 | |
| | 1, 3,11,41, 0 | 5.92 | 5.92 | - | 4.07 | 0.0 | |
| | 1, 3,23,41, 0 | 5.92 | 5.92 | - | 0.91 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 4.43 | 0.0 | |
| ENDPOST # 10 | 1, 3, 0, 0, 0 | - | - | - | 6.70 | 0.0 | AT 191.50' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | 4.13 | 4.13 | 1.89 | - | 0.0 | |
| | 1,23,41, 0, 0 | 4.13 | 4.13 | 4.45 | - | 0.0 | |
| | 1, 3,11,41, 0 | 4.13 | 4.13 | - | 3.28 | 0.0 | |
| | 1, 3,23,41, 0 | 4.13 | 4.13 | - | 0.72 | 0.0 | |
| | 1,15,18, 0, 0 | - | - | - | 3.61 | 0.0 | |

MAXIMUM FOUNDATION LOADS:
1. MAX FOUNDATION LOADS CAN BE FROM ANY LOAD CASE
2. MAX FOUNDATION LOADS ARE NOT FACTORED FOR ANY LOAD CASE

| SIDE | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) | |
|---|---|---|---|---|---|---|
| BACK SW COL | 1.79 | 2.51 | - | 0.81 | 0.0 | |
| FRONT SW COL | 1.79 | 2.51 | - | 0.80 | 0.0 | |
| ENDPOST # 1 | 4.13 | 4.13 | 4.43 | 6.68 | 0.0 | AT 8.50' FROM BACK BLDG LINE |
| ENDPOST # 2 | 5.92 | 5.92 | 5.52 | 8.31 | 0.0 | AT 28.50' FROM BACK BLDG LINE |
| ENDPOST # 3 | 6.09 | 6.09 | 5.38 | 8.24 | 0.0 | AT 48.50' FROM BACK BLDG LINE |
| ENDPOST # 4 | 6.26 | 6.26 | 4.98 | 7.41 | 0.0 | AT 68.50' FROM BACK BLDG LINE |
| ENDPOST # 5 | 7.63 | 7.63 | 6.20 | 10.35 | 0.0 | AT 88.50' FROM BACK BLDG LINE |
| ENDPOST # 6 | 6.87 | 6.87 | 5.96 | 9.32 | 0.0 | AT 116.00' FROM BACK BLDG LINE |
| ENDPOST # 7 | 5.55 | 5.55 | 4.01 | 6.26 | 0.0 | AT 131.50' FROM BACK BLDG LINE |
| ENDPOST # 8 | 6.09 | 6.09 | 5.57 | 8.44 | 0.0 | AT 151.50' FROM BACK BLDG LINE |
| ENDPOST # 9 | 5.92 | 5.92 | 5.47 | 8.26 | 0.0 | AT 171.50' FROM BACK BLDG LINE |
| ENDPOST # 10 | 4.13 | 4.13 | 4.45 | 6.70 | 0.0 | AT 191.50' FROM BACK BLDG LINE |

BAY SPACING = 12.50 FT.

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA -------> MARK NO. | WIDTH | | TK | | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE |
|---|---|---|---|---|---|---|---|---|
| BACK | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 |
| FRONT | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 |
| ENDPOST # 1 | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 |
| ENDPOST # 2 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 3 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 4 | BP-B08315 | 8.00 | X | 3/8 | X | 15.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 5 | BP-B08318 | 8.00 | X | 3/8 | X | 18.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 6 | BP-B08316 | 8.00 | X | 3/8 | X | 16.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 7 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 8 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 9 | BP-B08314 | 8.00 | X | 3/8 | X | 14.00 | (4) | 3/4 DIA. A36 |
| ENDPOST # 10 | BP-A08310 | 8.00 | X | 3/8 | X | 10.00 | (2) | 3/4 DIA. A36 |

VARCO-PRUDEN
A UNIT OF AMCA INTERNATIONAL CORPORATION
JOB 38852 *
BUILDER LUGBILL SUPPLY CENTER
CUSTOMER (WAREHOUSE)
JOB SITE CITY ARCHBOLD, OHIO

FRAME DESIGN - INPUT CONDITIONS

JOB: 38852 *
PAGE: 1
DATE: 8-30-84
PROFIT CENTER: WISCONSIN

BUILDING DESCRIPTION:

| ITEM | FEET & INCHES | DEC. FT. | DEC. IN. | METERS |
|---|---|---|---|---|
| SPAN = | 200'- 0 0/16 | 200.0000 | 2400.0000 | 60.9600 |
| BACK SIDEWALL HEIGHT = | 29'- 0 0/16 | 29.0000 | 348.0000 | 8.8392 |
| FRONT SIDEWALL HEIGHT = | 29'- 0 0/16 | 29.0000 | 348.0000 | 8.8392 |
| BUILDING LENGTH = | 210'- 0 0/16 | 210.0000 | 2520.0000 | 64.0080 |
| RIDGE FROM BACK BLDG LN= | 100'- 0 0/16 | 100.0000 | 1200.0000 | 30.4800 |
| ELEVATION OF FRONT COL.= | 0'- 0 0/16 | 0.0 | 0.0 | 0.0 |
| BACK ROOF PITCH = | 0.5000 : 12 | | | |
| FRONT ROOF PITCH = | 0.5000 : 12 | | | |

LOADING: ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF (PURLINS & SHEETING) + FRAME WEIGHT = 6.29 PSF)
LIVE = 25.00 PSF
WIND = 20.54 PSF
SNOW = 20.00 PSF

THE ABOVE LOADS COMBINED WITH ANY SPECIAL LOADS APPEAR IN 6 LOAD CASES AS DESCRIBED BELOW:

| LOAD CODES | DESCRIPTION | | | STRESS FACTORS |
|---|---|---|---|---|
| 1, 3, 0, 0, 0 DEAD LOAD | LIVE LOAD | | | 1.00 |
| 1,11,41, 0, 0 DEAD LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | | 1.33 |
| 1,23,41, 0, 0 DEAD LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | | 1.33 |
| 1, 3,11,41, 0 DEAD LOAD | LIVE LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | 1.33 |
| 1, 3,23,41, 0 DEAD LOAD | LIVE LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | 1.33 |
| 1,15,16, 0, 0 DEAD LOAD | SNOW BACK TO RIDGE | 1/2 SNOW FRT TO RIDG | | 1.00 |

BAY SPACINGS FOLLOW: (BACK SIDEWALL LEFT TO RIGHT)
2 BAYS AT 30' 0 0/16" BETWEEN FRAME LN. 1 AND FRAME LN. 3
6 BAYS AT 25' 0 0/16" BETWEEN FRAME LN. 3 AND FRAME LN. 9
BUILDING LENGTH IS 210' 0 0/16"

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PURLIN AND GIRT DATA FOLLOWS:
        BACK SIDEWALL GIRT DATA  -  DIMENSION FROM BLDG. LN. TO OUTSIDE COLUMN FACE IS  0'  8  1/ 2"
                                    MAXIMUM GIRT SPACING IS  6'  9  3/ 4"
                                    BACK SIDEWALL GIRT SPACINGS ( BASE TO EAVE )
                                    C  7'  2  1/ 4",  Z  5'  0  0/16",  Z  5'  0  0/16",  Z  5'  0  0/16",
                                       6'  9  3/ 4",
        FRONT SIDEWALL GIRT DATA -  DIMENSION FROM BLDG. LN. TO OUTSIDE COLUMN FACE IS  0'  8  1/ 2"
                                    MAXIMUM GIRT SPACING IS  6'  9  3/ 4"
                                    FRONT SIDEWALL GIRT SPACINGS ( BASE TO EAVE )
                                    C  7'  2  1/ 4",  Z  5'  0  0/16",  Z  5'  0  0/16",  Z  5'  0  0/16",
                                       6'  9  3/ 4",
        BACK SLOPE PURLIN DATA   -  DIMENSION FROM BLDG. LN. TO EAVE PURLIN IS  0'  3  7/16"
                                    DIMENSION FROM EAVE PURLIN TO FIRST INTERIOR PURLIN IS  4'  1  5/ 8"
                                    SECOND PURLIN SPACE IS  4'  1  5/ 8"
                                    18 PURLIN  SPACES AT  5'  0  0/16"
                                    RIDGE SPACE IS  1'  6  0/16"

        FRONT SLOPE PURLIN DATA  -  DIMENSION FROM BLDG. LN. TO EAVE PURLIN IS  0'  3  7/16"
                                    DIMENSION FROM EAVE PURLIN TO FIRST INTERIOR PURLIN IS  4'  1  5/ 8"
                                    SECOND PURLIN SPACE IS  4'  1  5/ 8"
                                    18 PURLIN  SPACES AT  5'  0  0/16"
                                    RIDGE SPACE IS  1'  6  0/16"


NUMBER OF FRAMES FOR THIS JOB DESIGN IS 3
FRAME NUMBER ASSIGNMENT BY FRAME LN.: 1, 1, 2, 3, 3, 3, 3, 3, 7,
   FULL FRAME LOCATED ON FRAME LINE 1
   POST AND BEAM ASSUMED AT LAST FRAME LINE  9
   BACK SIDEWALL COLUMNS ARE STANDARD (OUTSIDE FLANGE IS VERTICAL)
   FRONT SIDEWALL COLUMNS ARE STANDARD (OUTSIDE FLANGE IS VERTICAL)
   THE TOPS OF THE INTERIOR COLUMNS ARE RELEASED
   FRAME DESIGNED UTILIZING WEB STIFFENERS AS REQUIRED
   MAXIMUM ALLOWABLE SUM PERCENT = 1.030
   NORMAL TAPERED MEMBER DESIGN FOR BACK COLUMN
   NORMAL TAPERED MEMBER DESIGN FOR FRONT COLUMN
   BACK COLUMN BOLTED AT TOP OF COLUMN - STANDARD LOCATION
   FRONT COLUMN BOLTED AT TOP OF COLUMN - STANDARD LOCATION
   FRAME IS DESIGNED AND DETAILED FOR SYMMETRY ABOUT THE RIDGE
```

```
PURLIN AND GIRT DATA FOLLOWS:
        BACK SIDEWALL GIRT DATA  -  DIMENSION FROM BLDG. LN. TO OUTSIDE COLUMN FACE IS  0'  8  1/ 2"
                                    MAXIMUM GIRT SPACING IS  6'  9  3/ 4"
                                    BACK SIDEWALL GIRT SPACINGS ( BASE TO EAVE )
                                    C  7'  2  1/ 4",  Z  5'  0  0/16",  Z  5'  0  0/16",  Z  5'  0  0/16",
                                       6'  9  3/ 4",
        FRONT SIDEWALL GIRT DATA -  DIMENSION FROM BLDG. LN. TO OUTSIDE COLUMN FACE IS  0'  8  1/ 2"
                                    MAXIMUM GIRT SPACING IS  6'  9  3/ 4"
                                    FRONT SIDEWALL GIRT SPACINGS ( BASE TO EAVE )
                                    C  7'  2  1/ 4",  Z  5'  0  0/16",  Z  5'  0  0/16",  Z  5'  0  0/16",
                                       6'  9  3/ 4",
        BACK SLOPE PURLIN DATA   -  DIMENSION FROM BLDG. LN. TO EAVE PURLIN IS  0'  3  7/16"
                                    DIMENSION FROM EAVE PURLIN TO FIRST INTERIOR PURLIN IS  4'  1  5/ 8"
                                    SECOND PURLIN SPACE IS  4'  1  5/ 8"
                                    18 PURLIN  SPACES AT  5'  0  0/16"
                                    RIDGE SPACE IS  1'  6  0/16"

        FRONT SLOPE PURLIN DATA  -  DIMENSION FROM BLDG. LN. TO EAVE PURLIN IS  0'  3  7/16"
                                    DIMENSION FROM EAVE PURLIN TO FIRST INTERIOR PURLIN IS  4'  1  5/ 8"
                                    SECOND PURLIN SPACE IS  4'  1  5/ 8"
                                    18 PURLIN  SPACES AT  5'  0  0/16"
                                    RIDGE SPACE IS  1'  6  0/16"


NUMBER OF FRAMES FOR THIS JOB DESIGN IS 3
FRAME NUMBER ASSIGNMENT BY FRAME LN.: 1, 1, 2, 3, 3, 3, 3, 3, 7,
    FULL FRAME LOCATED ON FRAME LINE 1
    POST AND BEAM ASSUMED AT LAST FRAME LINE  9
    BACK SIDEWALL COLUMNS ARE STANDARD (OUTSIDE FLANGE IS VERTICAL)
    FRONT SIDEWALL COLUMNS ARE STANDARD (OUTSIDE FLANGE IS VERTICAL)
    THE TOPS OF THE INTERIOR COLUMNS ARE RELEASED
    FRAME DESIGNED UTILIZING WEB STIFFENERS AS REQUIRED
    MAXIMUM ALLOWABLE SUM PERCENT = 1.030
    NORMAL TAPERED MEMBER DESIGN FOR BACK COLUMN
    NORMAL TAPERED MEMBER DESIGN FOR FRONT COLUMN
    BACK COLUMN BOLTED AT TOP OF COLUMN - STANDARD LOCATION
    FRONT COLUMN BOLTED AT TOP OF COLUMN - STANDARD LOCATION
    FRAME IS DESIGNED AND DETAILED FOR SYMMETRY ABOUT THE RIDGE
```

SPECIAL FRAME DATA FOR THE 1 FRAME FOLLOWS:

SYMMETRY = YES ✓ | SHAPE CODE = SP SPECIAL FRAMEINPUT

DEF CODE = 0 1=MIN.
2=MAX.
3=INT.

AVG BAY SPACE 30.00'

| | |
|---|---|
| NUMBER OF SUPPORTED POINTS | 5 |
| NUMBER OF SPECIAL MEMBER RELEASES | 0 |
| NUMBER OF INTERIOR COLUMNS | 3 |
| NUMBER OF MEMBERS | 17 |
| NUMBER OF CENTER LINE JOINT POINTS | 18 |

DESIGN CODE = SC STRESS CHECK FRAME

LOADING:

| | |
|---|---|
| | 3.00 ADDITIONAL DEAD LOAD |
| | 2.00 PURLINS & SHEETING |
| | 1.29 FRAME DEAD LOAD |
| TOTAL DEAD | 6.29 PSF |
| LIVE | 25.00 PSF |
| WIND | 20.54 PSF |
| SNOW | 20.00 PSF |

THIS FRAME REQUIRED ON FRAME LINES : 1, 2,

BOUNDARY DATA:

| POINT | X-SUP | Y-SUP | M-SUP | X-DISP | | Y-DISP | | ROTATION | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 18 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 6 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 10 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 14 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |

INTERIOR COLUMN SPACING AND LOCATION FROM BACK BUILDING LINE

| | | ELEVATION |
|---|---|---|
| SPACING 50' 0 0/16" | LOCATION 50' 0 0/16" | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 100' 0 0/16" | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 150' 0 0/16" | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 200' 0 0/16" = SPAN | |

THE FOLLOWING CLEARANCE DATA APPLIES TO FRAME NUMBER 1

VERTICAL CLEARANCE AT BACK HAUNCH 26' 9 3/ 4"
HORIZONTAL CLEARANCE BETWEEN EXTERIOR COLUMNS 193' 11 0/16"
VERTICAL CLEARANCE UNDER FRAME AT RIDGE 30' 3 1/ 2"
VERTICAL CLEARANCE AT FRONT HAUNCH 26' 9 3/ 4"

MEMBER DATA:

| MEM | FLANGE TK | FLANGE WIDTH | WEB TK | DEPTHS 1 | DEPTHS 2 | LENGTH (FT) | ANGLE (DEG) | WEIGHT (POUNDS) | JOINT NOS 1 | JOINT NOS 2 | FLANGE YIELDS | WEB YIELDS | KL XX (FT) | K LYY (FT) | LB (FT) | SPLICE CODES J1 | SPLICE CODES J2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FRAME SIDE 1 | | | | | | | | | | | | | | | | | |
| 1 | 1/ 4 | 5.0 | 1/ 8 | 12.00 | 28.00 | 28.320 | 270.000 | 490.0 | 1 | 2 | 50.0 | 42.0 | 40.26 | SET BY P&G SPACE | | BP | KN |
| FRAME SIDE 2 | | | | | | | | | | | | | | | | | |
| 2 | 1/ 4 | 6.0 | 1/ 8 | 19.00 | 19.00 | 29.378 | 182.386 | 533.8 | 2 | 3 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | KN | SS |
| 3 | 3/16 | 6.0 | 1/ 8 | 19.00 | 19.00 | 10.000 | 182.386 | 163.5 | 3 | 4 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | SS | SP |
| 4 | 5/16 | 7.0 | 3/16 | 19.00 | 37.00 | 10.412 | 182.386 | 333.0 | 4 | 5 | 50.0 | 50.0 | 47.03 | SET BY P&G SPACE | | SP | SS |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 15 LOCATED AT 50' 0 0/16" | | | | | | | | | | | | | | | | | |
| 5 | 5/16 | 7.0 | 3/16 | 37.00 | 21.00 | 9.588 | 182.386 | 330.8 | 5 | 7 | 50.0 | 50.0 | 50.09 | SET BY P&G SPACE | | SS | SP |
| 6 | 3/16 | 6.0 | 1/ 8 | 21.00 | 21.00 | 30.000 | 182.386 | 518.0 | 7 | 8 | 50.0 | 42.0 | 50.09 | SET BY P&G SPACE | | SP | SP |
| 7 | 5/16 | 7.0 | 3/16 | 21.00 | 26.00 | 10.000 | 182.386 | 297.6 | 8 | 9 | 50.0 | 50.0 | 50.09 | SET BY P&G SPACE | | SP | SS |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 16 LOCATED AT 100' 0 0/16" | | | | | | | | | | | | | | | | | |
| FRAME SIDE 3 | | | | | | | | | | | | | | | | | |
| 8 | 5/16 | 7.0 | 3/16 | 21.00 | 26.00 | 10.000 | 177.614 | 297.6 | 11 | 9 | 50.0 | 50.0 | 50.09 | SET BY P&G SPACE | | SP | SS |
| 9 | 3/16 | 6.0 | 1/ 8 | 21.00 | 21.00 | 30.000 | 177.614 | 518.0 | 12 | 11 | 50.0 | 42.0 | 50.09 | SET BY P&G SPACE | | SP | SP |
| 10 | 5/16 | 7.0 | 3/16 | 37.00 | 21.00 | 9.588 | 177.614 | 330.8 | 13 | 12 | 50.0 | 50.0 | 50.09 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 17 LOCATED AT 150' 0 0/16" | | | | | | | | | | | | | | | | | |
| 11 | 5/16 | 7.0 | 3/16 | 19.00 | 37.00 | 10.412 | 177.614 | 333.0 | 15 | 13 | 50.0 | 50.0 | 47.03 | SET BY P&G SPACE | | SP | SS |
| 12 | 3/16 | 6.0 | 1/ 8 | 19.00 | 19.00 | 10.000 | 177.614 | 163.5 | 16 | 15 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | SS | SP |
| 13 | 1/ 4 | 6.0 | 1/ 8 | 19.00 | 19.00 | 29.378 | 177.614 | 533.8 | 17 | 16 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | KN | SS |
| FRAME SIDE 4 | | | | | | | | | | | | | | | | | |
| 14 | 1/ 4 | 5.0 | 1/ 8 | 12.00 | 28.00 | 28.320 | 90.000 | 490.0 | 18 | 17 | 50.0 | 42.0 | 40.26 | SET BY P&G SPACE | | BP | KN |
| INTERIOR COLUMNS FRAME SIDES 5, 6 AND 7 FOLLOW: | | | | | | | | | | | | | | | | | |
| FRAME SIDE 5 | | | | | | | | | | | | | | | | | |
| 15 | ~~5/16~~ | ~~9.0~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 27.372 | 90.000 | 768.4 | 6 | 5 | 50.0 | 50.0 | 27.37 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 6 | | | | | | | | | | | | | | | | | |
| 16 | ~~5/16~~ | ~~9.0~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 30.293 | 90.000 | 850.4 | 10 | 9 | 50.0 | 50.0 | 30.29 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 7 | | | | | | | | | | | | | | | | | |
| 17 | ~~5/16~~ | ~~9.0~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 27.372 | 90.000 | 768.4 | 14 | 13 | 50.0 | 50.0 | 27.37 | SET BY P&G SPACE | | BP | SP |

SUMMARY OF REACTIONS:

| SIDE | LOAD COMBINATION | HORIZONTAL | VERTICAL | MOMENT |
|---|---|---|---|---|
| BACK | 1, 3, 0, 0, 0 | 3.98 | 20.86 | -0.00 |
| FRONT | 1, 3, 0, 0, 0 | -3.98 | 20.86 | 0.00 |
| INTERIOR COLUMN # 1 | 1, 3, 0, 0, 0 | -0.00 | 51.45 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3, 0, 0, 0 | 0.00 | 43.10 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3, 0, 0, 0 | -0.00 | 51.45 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,11,41, 0, 0 | -7.04 | -10.96 | 0.00 |
| FRONT | 1,11,41, 0, 0 | -6.42 | -2.32 | 0.00 |
| INTERIOR COLUMN # 1 | 1,11,41, 0, 0 | 0.00 | -21.52 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,11,41, 0, 0 | 0.00 | -15.35 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,11,41, 0, 0 | 0.00 | -13.79 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,23,41, 0, 0 | 6.42 | -2.32 | -0.00 |
| FRONT | 1,23,41, 0, 0 | 7.04 | -10.96 | -0.00 |
| INTERIOR COLUMN # 1 | 1,23,41, 0, 0 | 0.00 | -13.79 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,23,41, 0, 0 | -0.00 | -15.35 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,23,41, 0, 0 | 0.00 | -21.52 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,11,41, 0 | -3.82 | 5.62 | 0.00 |
| FRONT | 1, 3,11,41, 0 | -9.65 | 14.26 | 0.00 |
| INTERIOR COLUMN # 1 | 1, 3,11,41, 0 | -0.00 | 19.72 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3,11,41, 0 | 0.00 | 19.03 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3,11,41, 0 | -0.00 | 27.45 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,23,41, 0 | 9.65 | 14.26 | -0.00 |
| FRONT | 1, 3,23,41, 0 | 3.82 | 5.62 | -0.00 |
| INTERIOR COLUMN # 1 | 1, 3,23,41, 0 | -0.00 | 27.45 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3,23,41, 0 | -0.00 | 19.03 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3,23,41, 0 | -0.00 | 19.72 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,15,18, 0, 0 | 2.68 | 16.82 | -0.00 |
| FRONT | 1,15,18, 0, 0 | -2.69 | 11.64 | 0.00 |
| INTERIOR COLUMN # 1 | 1,15,18, 0, 0 | -0.00 | 44.84 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,15,18, 0, 0 | 0.00 | 29.35 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,15,18, 0, 0 | -0.00 | 25.08 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA -------> MARK NO. | WIDTH | TK | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE | BLR | WELDING PATTERN |
|---|---|---|---|---|---|---|---|---|
| BACK | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 | 5.44 | OS-3 |
| FRONT | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 | 5.44 | OS-3 |
| INTERIOR COLUMN # 1 | BP-K10315 | 13 ~~10~~.00 X | ~~3/4~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 10.69 | OS-3 |
| INTERIOR COLUMN # 2 | BP-K10315 | 13 ~~10~~.00 X | ~~3/4~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 7.62 | OS-3 |
| INTERIOR COLUMN # 3 | BP-K10315 | 13 ~~10~~.00 X | ~~3/4~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 10.69 | OS-3 |

1/2

WEB STIFFENER REQUIREMENTS:

| MEMBER | STIFFENER NUMBER | DESCRIPTION | LOCATION (FT) | WEB DEPTH (IN) | H/T RATIO | A/H RATIO | A (IN) | STIFFENER SIZE TK | | WIDTH | SIDES | WELDING L - S | DETAIL ? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,13 | 1 | DIAGONAL KNEE STF. | | | | | | 5/16 | X | 2 13/16 | ONE | | YES |
| | 2 | COL./HAUNCH FLG EX | 1.12 | 18.500 | | | | 1/ 4 | X | 2 3/ 4 | BOTH | | YES |
| | 3 | INTERMEDIATE SHEAR | 2.66 | 18.500 | 137.55 | 1.00 | 18.50 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 4 | INTERMEDIATE SHEAR | 4.97 | 18.500 | 137.55 | 1.50 | 27.75 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 5 | INTERMEDIATE SHEAR | 8.82 | 16.500 | 137.55 | 2.50 | 46.25 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| 3,12 | 1 | INTERMEDIATE SHEAR | 5.79 | 18.625 | 138.48 | 2.00 | 37.25 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 2 | INTERMEDIATE SHEAR | 8.29 | 18.625 | 138.48 | 1.00 | 18.63 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 3 | INTERMEDIATE SHEAR | 9.15 | 18.625 | 138.48 | 1.00 | 18.63 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| 4,11 | 2 | INTERMEDIATE SHEAR | 7.32 | 31.662 | 168.86 | 3.00 | 94.99 | 3/ 8 | X | 3 0/16 | ONE | STD. CK-OK | YES |
| | 3 | BEARING (INT. COL) | 9.86 | 35.372 | | | | 1/ 4 | X | 3 1/ 4 | BOTH | STD. CK-OK | YES |
| 5,10 | 2 | INTERMEDIATE SHEAR | 7.67 | 24.266 | 129.42 | 3.00 | 72.80 | 3/16 | X | 2 3/ 8 | BOTH | STD. CK-OK | YES |
| 6, 9 | 2 | INTERMEDIATE SHEAR | 1.72 | 20.625 | 153.35 | 1.00 | 20.63 | 1/ 4 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 3 | INTERMEDIATE SHEAR | 3.44 | 20.625 | 153.35 | 1.00 | 20.63 | 1/ 4 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 4 | INTERMEDIATE SHEAR | 6.02 | 20.625 | 153.35 | 1.50 | 30.94 | 1/ 4 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 5 | INTERMEDIATE SHEAR | 28.29 | 20.625 | 153.35 | 2.50 | 51.56 | 1/ 4 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| 7, 8 | 2 | BEARING (INT. COL) | 9.95 | 25.352 | | | | 3/16 | X | 3 1/ 4 | BOTH | STD. CK-OK | YES |

BOLTED CONNECTION DATA:

| MEMBER | J # | I | PLATE DATA TK | WD | LENGTH | BOLT DATA SIZE | OUTSIDE #ROWS | OUTSIDE 4-BOLT | INSIDE #ROWS | INSIDE 4-BOLT | TYPE | MARK # | CONNECTION CAPACITY OUTSIDE | INSIDE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1, 14 | 2 | I | 4/ 8 X | 6.0 X | 2'- 5 0/16 | 3/4" DIA A325 | 3 | NO | 3 | NO | EXT | 3B06429033 | 1335.9 "K | 1335.9 "K |
| 2, 13 | 1 | I | 4/ 8 X | 6.0 X | 2'- 4 0/16 | 3/4" DIA A325 | 3 | NO | 3 | NO | FLUSH | 3A06428033 | 1335.9 "K | 1335.9 "K |
| 3, 12 | 2 | I | 4/ 8 X | 6.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 3 | NO | 1 | NO | EXT | 3B06420031 | 863.9 "K | 515.6 "K |
| 4, 11 | 1 | I | 4/ 8 X | 7.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 3 | NO | 1 | NO | EXT | 3B07420031 | 863.9 "K | 515.6 "K |
| 5, 10 | 2 | I | 4/ 8 X | 7.0 X | 1'-10 0/16 | 3/4" DIA A325 | 3 | NO | 2 | NO | EXT | 3B07422032 | 978.6 "K | 794.4 "K |
| 6, 9 | 1 | I | 4/ 8 X | 6.0 X | 1'-10 0/16 | 3/4" DIA A325 | 3 | NO | 2 | NO | EXT | 3B06422032 | 978.6 "K | 794.4 "K |
| 6, 9 | 2 | I | 3/ 8 X | 6.0 X | 1'-10 0/16 | 3/4" DIA A325 | 2 | NO | 2 | NO | EXT | 3B06322022 | 446.8 "K | 446.8 "K |
| 7, 8 | 1 | I | 3/ 8 X | 7.0 X | 1'-10 0/16 | 3/4" DIA A325 | 2 | NO | 2 | NO | EXT | 3B07322022 | 446.8 "K | 446.8 "K |
| INTERIOR | I | COLUMN CONNECTION PLATES | | | | | | | | | | | | |
| 15, 17 | 2 | I | 3/ 8 X | 9.0 X | 1'- 3 1/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B09315111 | 213.9 "K | 213.9 "K |
| 16, 16 | 2 | I | 3/ 8 X | 9.0 X | 1'- 3 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B09315011 | 212.6 "K | 212.6 "K |

FLANGE BRACING REQUIREMENTS:

*

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 7 | 7 | 6 | 6 | 6 | 6 | 6 |
| LOCATION | 1'- 6 0/16 | 6'- 6 0/16 | 11'- 6 0/16 | 16'- 6 0/16 | 21'- 6 0/16 | 26'- 6 0/16 | 31'- 6 0/16 |
| DEPTH @ FB | 25.2497 | 22.7497 | 20.9999 | 20.9999 | 20.9999 | 20.9999 | 20.9999 |
| FB MARK # | FB3034 | FB3014 | NOT REQ D | FB3000 | NOT REQ D | FB3000 | NOT REQ D |

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 6 | 5 | 5 | 4 | 4 | 3 | 3 |
| LOCATION | 36'- 6 0/16 | 41'- 6 0/16 | 46'- 6 0/16 | 51'- 6 0/16 | 56'- 6 0/16 | 61'- 6 0/16 | 66'- 6 0/16 |
| DEPTH @ FB | 20.9999 | 23.5028 | 31.8467 | 33.6945 | 25.0505 | 18.9999 | 19.0001 |
| FB MARK # | NOT REQ D | FB3020 | FB4040 | FB4054 | FB3030 | NOT REQ D | NOT REQ D |

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LOCATION | 71'- 6 0/16 | 76'- 6 0/16 | 81'- 6 0/16 | 86'- 6 0/16 | 91'- 6 0/16 | 95'- 7 5/ 8 | 99'- 9 1/ 4 |
| DEPTH @ FB | 19.0138 | 19.0597 | 19.1059 | 19.1518 | 19.1980 | 19.2359 | 0.0 |
| FB MARK # | FB2104 | NOT REQ D | NOT REQ D | FB2110 | NOT REQ D | FB2110 | NOT REQ D |

BACK SIDE OF FRAME BASE TO EAVE:

| | | | | |
|---|---|---|---|---|
| MEMBER # | 1 | 1 | 1 | 1 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 |
| DEPTH @ FB | 16.2991 | 19.2898 | 22.2805 | 25.2712 |
| FB MARK # | FB2100 | FB3000 | FB3020 | FB3044 |

SPAN = 200'-0
BACK SIDEWALL HEIGHT = 29'-0
FRONT SIDEWALL HEIGHT = 29'-0
BUILDING LENGTH = 210'-0

RIDGE FROM BACK BLDG LN= 100'-0
ELEVATION OF FRONT COL =
BACK ROOF PITCH = 0.5000 : 12
FRONT ROOF PITCH = 0.5000 : 12

THIS FRAME REQUIRED ON FRAME LINES : 1, 2,

BAY SPACING = 30.00 FT.

LOADING: ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF (PURLINS & SHEETING) + FRAME WEIGHT = 6.29 PSF)
LIVE = 25.00 PSF
WIND = 20.54 PSF
SNOW = 20.00 PSF

THE ABOVE LOADS COMBINED WITH ANY SPECIAL LOADS APPEAR IN 6 LOAD CASES AS DESCRIBED BELOW:

| LOAD CODES | DESCRIPTION | | | STRESS FACTORS |
|---|---|---|---|---|
| 1, 3, 0, 0, 0 DEAD LOAD | LIVE LOAD | | | 1.00 |
| 1,11,41, 0, 0 DEAD LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | | 1.33 |
| 1,23,41, 0, 0 DEAD LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | | 1.33 |
| 1, 3,11,41, 0 DEAD LOAD | LIVE LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | 1.33 |
| 1, 3,23,41, 0 DEAD LOAD | LIVE LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | 1.33 |
| 1,15,18, 0, 0 DEAD LOAD | SNOW BACK TO RIDGE | 1/2 SNOW FRT TO RIDG | | 1.00 |

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| BACK SW COL | 1, 3, 0, 0, 0 | - | 3.98 | - | 20.86 | 0.00 |
| | 1,11,41, 0, 0 | 7.04 | - | 10.96 | - | -0.00 |
| | 1,23,41, 0, 0 | - | 6.42 | 2.32 | - | 0.00 |
| | 1, 3,11,41, 0 | 3.82 | - | - | 5.62 | -0.00 |
| | 1, 3,23,41, 0 | - | 9.65 | - | 14.26 | 0.00 |
| | 1,15,18, 0, 0 | - | 2.68 | - | 16.82 | 0.00 |
| FRONT SW COL | 1, 3, 0, 0, 0 | - | 3.98 | - | 20.86 | -0.00 |
| | 1,11,41, 0, 0 | - | 6.42 | 2.32 | - | -0.00 |
| | 1,23,41, 0, 0 | 7.04 | - | 10.96 | - | 0.00 |
| | 1, 3,11,41, 0 | - | 9.65 | - | 14.26 | -0.00 |
| | 1, 3,23,41, 0 | 3.82 | - | - | 5.62 | 0.00 |
| | 1,15,18, 0, 0 | - | 2.69 | - | 11.64 | -0.00 |
| INT COL # 1 | 1, 3, 0, 0, 0 | - | - | - | 51.45 | -0.00 AT 50.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 21.52 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 13.79 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 19.72 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 27.45 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 44.84 | -0.00 |

BAY SPACING = 30.00 FT.

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| INT COL # 2 | 1, 3, 0, 0, 0 | - | - | - | 43.10 | 0.00 AT 100.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 15.35 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 15.35 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 19.03 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 19.03 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 29.35 | 0.00 |
| INT COL # 3 | 1, 3, 0, 0, 0 | - | - | - | 51.45 | -0.00 AT 150.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 13.79 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 21.52 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 27.45 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 19.72 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 25.08 | 0.00 |

MAXIMUM FOUNDATION LOADS:
1. MAX FOUNDATION LOADS CAN BE FROM ANY LOAD CASE
2. MAX FOUNDATION LOADS ARE NOT FACTORED FOR ANY LOAD CASE

| SIDE | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|
| BACK SW COL | 7.04 | 9.65 | 10.96 | 20.86 | 0.00 |
| FRONT SW COL | 7.04 | 9.65 | 10.96 | 20.86 | 0.00 |
| INT COL # 1 | - | - | 21.52 | 51.45 | 0.00 AT 50.00' FROM BACK BLDG LINE |
| INT COL # 2 | - | - | 15.35 | 43.10 | 0.00 AT 100.00' FROM BACK BLDG LINE |
| INT COL # 3 | - | - | 21.52 | 51.45 | 0.00 AT 150.00' FROM BACK BLDG LINE |

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA -------> MARK NO. | WIDTH | TK | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE |
|---|---|---|---|---|---|---|
| BACK | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA, A36 |
| FRONT | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA, A36 |
| INTERIOR COLUMN # 1 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA, A36 |
| INTERIOR COLUMN # 2 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA, A36 |
| INTERIOR COLUMN # 3 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA, A36 |
| | | | 1/2 | | | |

BUILDER LUGBILL SUPPLY CENTER
CUSTOMER (WAREHOUSE)
JOB SITE CITY ARCHBOLD, OHIO

SPECIAL FRAME DATA FOR THE 2 FRAME FOLLOWS:

SYMMETRY = YES

SHAPE CODE = SP SPECIAL FRAMEINPUT

DEF CODE = 0 1=MIN.
2=MAX.
3=INT.

AVG BAY SPACE 27.50'

| | |
|---|---|
| NUMBER OF SUPPORTED POINTS | 5 |
| NUMBER OF SPECIAL MEMBER RELEASES | 0 |
| NUMBER OF INTERIOR COLUMNS | 3 |
| NUMBER OF MEMBERS | 17 |
| NUMBER OF CENTER LINE JOINT POINTS | 18 |

DESIGN CODE = SC STRESS CHECK FRAME

LOADING:

| | | |
|---|---|---|
| | 3.00 | ADDITIONAL DEAD LOAD |
| | 2.00 | PURLINS & SHEETING |
| | 1.35 | FRAME DEAD LOAD |
| TOTAL DEAD | 6.35 | PSF |
| LIVE | 25.00 | PSF |
| WIND | 20.54 | PSF |
| SNOW | 20.00 | PSF |

THIS FRAME REQUIRED ON FRAME LINES : 3.

BOUNDARY DATA:

| POINT | X-SUP | Y-SUP | M-SUP | X-DISP | | Y-DISP | | ROTATION | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 18 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 6 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 10 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 14 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |

INTERIOR COLUMN SPACING AND LOCATION FROM BACK BUILDING LINE

| | | | ELEVATION |
|---|---|---|---|
| SPACING 50' 0 0/16" | LOCATION 50' 0 0/16" | | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 100' 0 0/16" | | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 150' 0 0/16" | | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 200' 0 0/16" | = SPAN | |

THE FOLLOWING CLEARANCE DATA APPLIES TO FRAME NUMBER 2

VERTICAL CLEARANCE AT BACK HAUNCH 26' 10 3/ 4"
HORIZONTAL CLEARANCE BETWEEN EXTERIOR COLUMNS 193' 11 0/16"
VERTICAL CLEARANCE UNDER FRAME AT RIDGE 30' 3 1/ 2"
VERTICAL CLEARANCE AT FRONT HAUNCH 26' 10 13/16"

MEMBER DATA:

| MEM | FLANGE TK | FLANGE WIDTH | WEB TK | DEPTHS 1 | DEPTHS 2 | LENGTH (FT) | ANGLE (DEG) | WEIGHT (POUNDS) | JOINT NOS 1 | JOINT NOS 2 | FLANGE YIELDS | WEB YIELDS | KL XX (FT) | K LYY (FT) | LB (FT) | SPLICE CODES J1 | SPLICE CODES J2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FRAME SIDE 1 | | | | | | | | | | | | | | | | | |
| 1 | 3/16 | 6.0 | 1/ 8 | 12.00 | 28.00 | 28.320 | 270.000 | 467.1 | 1 | 2 | 50.0 | 42.0 | 40.39 | SET BY P&G SPACE | | BP | KN |
| FRAME SIDE 2 | | | | | | | | | | | | | | | | | |
| 2 | 1/ 4 | 6.0 | 1/ 8 | 18.00 | 18.00 | 29.388 | 182.386 | 521.0 | 2 | 3 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | KN | SS |
| 3 | 3/16 | 6.0 | 1/ 8 | 18.00 | 18.00 | 10.000 | 182.386 | 158.9 | 3 | 4 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | SS | SP |
| 4 | 5/16 | 6.0 | 3/16 | 18.00 | 39.00 | 10.395 | 182.386 | 313.9 | 4 | 5 | 50.0 | 50.0 | 47.03 | SET BY P&G SPACE | | SP | SS |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 15 LOCATED AT 50' 0 0/16" | | | | | | | | | | | | | | | | | |
| 5 | 5/16 | 6.0 | 3/16 | 39.00 | 21.00 | 9.595 | 182.386 | 317.2 | 5 | 7 | 50.0 | 50.0 | 50.10 | SET BY P&G SPACE | | SS | SP |
| 6 | 3/16 | 5.0 | 1/ 8 | 21.00 | 21.00 | 30.000 | 182.386 | 479.7 | 7 | 8 | 50.0 | 42.0 | 50.10 | SET BY P&G SPACE | | SP | SP |
| 7 | 5/16 | 6.0 | 3/16 | 21.00 | 26.00 | 10.000 | 182.386 | 276.4 | 8 | 9 | 50.0 | 50.0 | 50.10 | SET BY P&G SPACE | | SP | SS |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 16 LOCATED AT 100' 0 0/16" | | | | | | | | | | | | | | | | | |
| FRAME SIDE 3 | | | | | | | | | | | | | | | | | |
| 8 | 5/16 | 6.0 | 3/16 | 21.00 | 26.00 | 10.000 | 177.614 | 276.4 | 11 | 9 | 50.0 | 50.0 | 50.10 | SET BY P&G SPACE | | SP | SS |
| 9 | 3/16 | 5.0 | 1/ 8 | 21.00 | 21.00 | 30.000 | 177.614 | 479.7 | 12 | 11 | 50.0 | 42.0 | 50.10 | SET BY P&G SPACE | | SP | SP |
| 10 | 5/16 | 6.0 | 3/16 | 39.00 | 21.00 | 9.595 | 177.614 | 317.2 | 13 | 12 | 50.0 | 50.0 | 50.10 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 17 LOCATED AT 150' 0 0/16" | | | | | | | | | | | | | | | | | |
| 11 | 5/16 | 6.0 | 3/16 | 18.00 | 39.00 | 10.395 | 177.614 | 313.9 | 15 | 13 | 50.0 | 50.0 | 47.03 | SET BY P&G SPACE | | SP | SS |
| 12 | 3/16 | 6.0 | 1/ 8 | 18.00 | 18.00 | 10.000 | 177.614 | 158.9 | 16 | 15 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | SS | SP |
| 13 | 1/ 4 | 6.0 | 1/ 8 | 18.00 | 18.00 | 29.388 | 177.614 | 521.0 | 17 | 16 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | KN | SS |
| FRAME SIDE 4 | | | | | | | | | | | | | | | | | |
| 14 | 3/16 | 6.0 | 1/ 8 | 12.00 | 28.00 | 28.320 | 90.000 | 467.1 | 18 | 17 | 50.0 | 42.0 | 40.39 | SET BY P&G SPACE | | BP | KN |
| INTERIOR COLUMNS FRAME SIDES 5, 6 AND 7 FOLLOW: | | | | | | | | | | | | | | | | | |
| FRAME SIDE 5 | | | | | | | | | | | | | | | | | |
| 15 | ~~5/16~~ | ~~9.0~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 27.219 | 90.000 | 764.1 | 6 | 5 | 50.0 | 50.0 | 27.22 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 6 | | | | | | | | | | | | | | | | | |
| 16 | ~~5/16~~ | ~~9.0~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 30.293 | 90.000 | 850.4 | 10 | 9 | 50.0 | 50.0 | 30.29 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 7 | | | | | | | | | | | | | | | | | |
| 17 | ~~5/16~~ | ~~9.0~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 27.219 | 90.000 | 764.1 | 14 | 13 | 50.0 | 50.0 | 27.22 | SET BY P&G SPACE | | BP | SP |

SUMMARY OF REACTIONS:

| SIDE | LOAD COMBINATION | HORIZONTAL | VERTICAL | MOMENT |
|---|---|---|---|---|
| BACK | 1, 3, 0, 0, 0 | 3.66 | 19.12 | -0.00 |
| FRONT | 1, 3, 0, 0, 0 | -3.66 | 19.12 | 0.00 |
| INTERIOR COLUMN # 1 | 1, 3, 0, 0, 0 | -0.00 | 47.35 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3, 0, 0, 0 | -0.00 | 39.50 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3, 0, 0, 0 | -0.00 | 47.35 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,11,41, 0, 0 | -6.43 | -9.98 | 0.00 |
| FRONT | 1,11,41, 0, 0 | -5.87 | -2.09 | 0.00 |
| INTERIOR COLUMN # 1 | 1,11,41, 0, 0 | 0.00 | -19.69 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,11,41, 0, 0 | 0.00 | -13.92 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,11,41, 0, 0 | 0.00 | -12.56 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,23,41, 0, 0 | 5.87 | -2.09 | -0.00 |
| FRONT | 1,23,41, 0, 0 | 6.43 | -9.98 | -0.00 |
| INTERIOR COLUMN # 1 | 1,23,41, 0, 0 | 0.00 | -12.56 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,23,41, 0, 0 | -0.00 | -13.92 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,23,41, 0, 0 | 0.00 | -19.69 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,11,41, 0 | -3.47 | 5.19 | 0.00 |
| FRONT | 1, 3,11,41, 0 | -8.84 | 13.07 | 0.00 |
| INTERIOR COLUMN # 1 | 1, 3,11,41, 0 | -0.00 | 18.18 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3,11,41, 0 | 0.00 | 17.50 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3,11,41, 0 | -0.00 | 25.32 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,23,41, 0 | 8.84 | 13.07 | -0.00 |
| FRONT | 1, 3,23,41, 0 | 3.47 | 5.19 | -0.00 |
| INTERIOR COLUMN # 1 | 1, 3,23,41, 0 | -0.00 | 25.32 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3,23,41, 0 | -0.00 | 17.50 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3,23,41, 0 | -0.00 | 18.18 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,15,18, 0, 0 | 2.47 | 15.42 | -0.00 |
| FRONT | 1,15,18, 0, 0 | -2.48 | 10.69 | 0.00 |
| INTERIOR COLUMN # 1 | 1,15,18, 0, 0 | -0.00 | 41.28 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,15,18, 0, 0 | 0.00 | 26.93 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,15,18, 0, 0 | -0.00 | 23.13 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA -------> MARK NO. | WIDTH | TK | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE | BLR | WELDING PATTERN |
|---|---|---|---|---|---|---|---|---|
| BACK | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 | 4.96 | OS-3 |
| FRONT | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 | 4.96 | OS-3 |
| INTERIOR COLUMN # 1 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 9.78 | OS-3 |
| INTERIOR COLUMN # 2 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 6.91 | OS-3 |
| INTERIOR COLUMN # 3 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 9.78 | OS-3 |

1/2

WEB STIFFENER REQUIREMENTS:

| MEMBER | STIFFENER NUMBER | DESCRIPTION | LOCATION (FT) | WEB DEPTH (IN) | H/T RATIO | A/H RATIO | A (IN) | STIFFENER SIZE TK | | WIDTH | SIDES | WELDING L - S | DETAIL ? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,13 | 1 | DIAGONAL KNEE STF. | | | | | | 5/16 | X | 2 13/16 | ONE | | YES |
| | 2 | COL./HAUNCH FLG EX | 1.12 | 17.500 | | | | 1/ 4 | X | 2 3/ 4 | BOTH | | YES |
| | 3 | INTERMEDIATE SHEAR | 3.31 | 17.500 | 130.11 | 1.50 | 26.25 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| | 4 | INTERMEDIATE SHEAR | 6.95 | 17.500 | 130.11 | 2.50 | 43.75 | 3/16 | X | 2 1/ 2 | ONE | STD. CK-OK | YES |
| 3,12 | 1 | INTERMEDIATE SHEAR | 8.28 | 17.625 | 131.04 | 2.00 | 35.25 | 3/16 | X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| 4,11 | 2 | INTERMEDIATE SHEAR | 7.53 | 33.313 | 177.67 | 3.00 | 99.94 | 3/16 | X | 2 3/ 8 | BOTH | STD. CK-OK | YES |
| | 3 | BEARING (INT. COL) | 9.85 | 37.204 | | | | 1/ 4 | X | 2 3/ 4 | BOTH | STD. CK-OK | YES |
| 5,10 | 2 | INTERMEDIATE SHEAR | 7.99 | 24.196 | 129.04 | 3.00 | 72.59 | 3/16 | X | 2 3/ 8 | BOTH | STD. CK-OK | YES |
| 6, 9 | 2 | INTERMEDIATE SHEAR | 1.72 | 20.625 | 153.35 | 1.00 | 20.63 | 5/16 | X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| | 3 | INTERMEDIATE SHEAR | 4.30 | 20.625 | 153.35 | 1.50 | 30.94 | 5/16 | X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| | 4 | INTERMEDIATE SHEAR | 17.15 | 20.625 | 153.35 | 2.50 | 51.56 | 5/16 | X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| | 5 | INTERMEDIATE SHEAR | 21.45 | 20.625 | 153.35 | 2.50 | 51.56 | 5/16 | X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| | 6 | INTERMEDIATE SHEAR | 25.72 | 20.625 | 153.35 | 2.50 | 51.56 | 5/16 | X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| 7, 8 | 2 | BEARING (INT. COL) | 9.95 | 25.352 | | | | 1/ 4 | X | 2 3/ 4 | BOTH | STD. CK-OK | YES |

BOLTED CONNECTION DATA:

| MEMBER | J T # | PLATE DATA TK | WD | LENGTH | BOLT DATA SIZE | OUTSIDE #ROWS | OUTSIDE 4-BOLT | INSIDE #ROWS | INSIDE 4-BOLT | TYPE | MARK # | CONNECTION CAPACITY OUTSIDE | INSIDE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1, 14 | 2 | 4/ 8 X | 6.0 X | 2'- 5 0/16 | 3/4" DIA A325 | 2 | NO | 2 | NO | EXT | 3B06429022 | 1102.4 "K | 1102.4 "K |
| 2, 13 | 1 | 4/ 8 X | 6.0 X | 2'- 4 0/16 | 3/4" DIA A325 | 2 | NO | 2 | NO | FLUSH | 3A06428022 | 1102.4 "K | 1102.4 "K |
| 3, 12 | 2 | 4/ 8 X | 6.0 X | 1'- 7 0/16 | 3/4" DIA A325 | 3 | NO | 1 | NO | EXT | 3B06419031 | 806.6 "K | 484.9 "K |
| 4, 11 | 1 | 4/ 8 X | 6.0 X | 1'- 7 0/16 | 3/4" DIA A325 | 3 | NO | 1 | NO | EXT | 3B06419031 | 806.6 "K | 484.9 "K |
| 5, 10 | 2 | 4/ 8 X | 6.0 X | 1'-10 0/16 | 3/4" DIA A325 | 3 | NO | 2 | NO | EXT | 3B06422032 | 936.8 "K | 752.6 "K |
| 6, 9 | 1 | 4/ 8 X | 6.0 X | 1'-10 0/16 | 3/4" DIA A325 | 3 | NO | 2 | NO | EXT | 3B06422032 | 936.8 "K | 752.6 "K |
| 6, 9 | 2 | 3/ 8 X | 6.0 X | 1'-10 0/16 | 3/4" DIA A325 | 2 | NO | 2 | NO | EXT | 3B06322022 | 423.3 "K | 423.3 "K |
| 7, 8 | 1 | 3/ 8 X | 6.0 X | 1'-10 0/16 | 3/4" DIA A325 | 2 | NO | 2 | NO | EXT | 3B06322022 | 423.3 "K | 423.3 "K |
| INTERIOR COLUMN CONNECTION PLATES | | | | | | | | | | | | | |
| 15, 17 | 2 | 3/ 8 X | 9.0 X | 1'- 3 1/ 8 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B09315111 | 179.7 "K | 179.7 "K |
| 16, 16 | 2 | 3/ 8 X | 9.0 X | 1'- 3 0/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B09315011 | 178.0 "K | 178.0 "K |

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 7 | 7 | 6 | 6 | 6 | 6 | 6 |
| LOCATION | 1'- 6 0/16 | 6'- 6 0/16 | 11'- 6 0/16 | 16'- 6 0/16 | 21'- 6 0/16 | 26'- 6 0/16 | 31'- 6 0/16 |
| DEPTH @ FB | 25.2497 | 22.7497 | 21.0001 | 21.0001 | 21.0001 | 21.0001 | 21.0001 |
| FB MARK # | FB3034 | FB3014 | NOT REQ D | FB3000 | NOT REQ D | FB3000 | NOT REQ D |

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 6 | 5 | 5 | 4 | 4 | 3 | 3 |
| LOCATION | 36'- 6 0/16 | 41'- 6 0/16 | 46'- 6 0/16 | 51'- 6 0/16 | 56'- 6 0/16 | 61'- 6 0/16 | 66'- 6 0/16 |
| DEPTH @ FB | 21.0001 | 23.8138 | 33.1941 | 35.1518 | 25.0508 | 18.0000 | 18.0000 |
| FB MARK # | FB3000 | FB3020 | FB4050 | FB4064 | FB3030 | NOT REQ D | NOT REQ D |

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LOCATION | 71'- 6 0/16 | 76'- 6 0/16 | 81'- 6 0/16 | 86'- 6 0/16 | 91'- 6 0/16 | 95'- 7 5/ 8 | 99'- 9 1/ 4 |
| DEPTH @ FB | 18.0137 | 18.0598 | 18.1058 | 18.1520 | 18.1981 | 18.2360 | 0.0 |
| FB MARK # | FB2100 | NOT REQ D | NOT REQ D | FB2100 | NOT REQ D | FB2100 | NOT REQ D |

BACK SIDE OF FRAME BASE TO EAVE:

| | | | | |
|---|---|---|---|---|
| MEMBER # | 1 | 1 | 1 | 1 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 |
| DEPTH @ FB | 16.2858 | 19.2672 | 22.2485 | 25.2299 |
| FB MARK # | FB2100 | FB3000 | FB3020 | FB3044 |

KTR

SPAN = 200'-0
BACK SIDEWALL HEIGHT = 29'-0
FRONT SIDEWALL HEIGHT = 29'-0
BUILDING LENGTH = 210'-0

RIDGE FROM BACK BLDG LN= 100'-0
ELEVATION OF FRONT COL. =
BACK ROOF PITCH = 0.5000 : 12
FRONT ROOF PITCH = 0.5000 : 12

THIS FRAME REQUIRED ON FRAME LINES : 3,

BAY SPACING = 27.50 FT.

LOADING: ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF (PURLINS & SHEETING) + FRAME WEIGHT = 6.35 PSF)
LIVE = 25.00 PSF
WIND = 20.54 PSF
SNOW = 20.00 PSF

THE ABOVE LOADS COMBINED WITH ANY SPECIAL LOADS APPEAR IN 6 LOAD CASES AS DESCRIBED BELOW:

| LOAD CODES | DESCRIPTION | | | | STRESS FACTORS |
|---|---|---|---|---|---|
| 1, 3, 0, 0, 0 | DEAD LOAD | LIVE LOAD | | | 1.00 |
| 1,11,41, 0, 0 | DEAD LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | | 1.33 |
| 1,23,41, 0, 0 | DEAD LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | | 1.33 |
| 1, 3,11,41, 0 | DEAD LOAD | LIVE LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | 1.33 |
| 1, 3,23,41, 0 | DEAD LOAD | LIVE LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | 1.33 |
| 1,15,18, 0, 0 | DEAD LOAD | SNOW BACK TO RIDGE | 1/2 SNOW FRT TO RIDG | | 1.00 |

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| BACK SW COL | 1, 3, 0, 0, 0 | - | 3.66 | - | 19.12 | 0.00 |
| | 1,11,41, 0, 0 | 6.43 | - | 9.98 | - | -0.00 |
| | 1,23,41, 0, 0 | - | 5.87 | 2.09 | - | 0.00 |
| | 1, 3,11,41, 0 | 3.47 | - | - | 5.19 | -0.00 |
| | 1, 3,23,41, 0 | - | 8.84 | - | 13.07 | 0.00 |
| | 1,15,18, 0, 0 | - | 2.47 | - | 15.42 | 0.00 |
| FRONT SW COL | 1, 3, 0, 0, 0 | - | 3.66 | - | 19.12 | -0.00 |
| | 1,11,41, 0, 0 | - | 5.87 | 2.09 | - | -0.00 |
| | 1,23,41, 0, 0 | 6.43 | - | 9.98 | - | 0.00 |
| | 1, 3,11,41, 0 | - | 8.84 | - | 13.07 | -0.00 |
| | 1, 3,23,41, 0 | 3.47 | - | - | 5.19 | 0.00 |
| | 1,15,18, 0, 0 | - | 2.48 | - | 10.69 | -0.00 |
| INT COL # 1 | 1, 3, 0, 0, 0 | - | - | - | 47.35 | -0.00 AT 50.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 19.69 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 12.55 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 18.18 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 25.32 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 41.28 | 0.00 |

BAY SPACING = 27.50 FT.

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| INT COL # 2 | 1, 3, 0, 0, 0 | - | - | - | 39.50 | -0.00 AT 100.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 13.92 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 13.92 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 17.50 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 17.50 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 26.93 | 0.00 |
| INT COL # 3 | 1, 3, 0, 0, 0 | - | - | - | 47.35 | -0.00 AT 150.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 12.56 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 19.69 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 25.32 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 13.18 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 23.13 | 0.00 |

MAXIMUM FOUNDATION LOADS:
1. MAX FOUNDATION LOADS CAN BE FROM ANY LOAD CASE
2. MAX FOUNDATION LOADS ARE NOT FACTORED FOR ANY LOAD CASE

| SIDE | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|
| BACK SW COL | 6.43 | 8.84 | 9.98 | 19.12 | 0.00 |
| FRONT SW COL | 6.43 | 8.84 | 9.98 | 19.12 | 0.00 |
| INT COL # 1 | - | - | 19.69 | 47.35 | 0.00 AT 50.00' FROM BACK BLDG LINE |
| INT COL # 2 | - | - | 13.92 | 39.50 | 0.00 AT 100.00' FROM BACK BLDG LINE |
| INT COL # 3 | - | - | 19.69 | 47.35 | 0.00 AT 150.00' FROM BACK BLDG LINE |

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA -------> MARK NO. | WIDTH | TK | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE |
|---|---|---|---|---|---|---|
| BACK | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 |
| FRONT | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 |
| INTERIOR COLUMN # 1 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 |
| INTERIOR COLUMN # 2 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 |
| INTERIOR COLUMN # 3 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 |

1/2

BUILDER LUGBILL SUPPLY CENTER
CUSTOMER (WAREHOUSE)
JOB SITE CITY ARCHBOLD, OHIO

SPECIAL FRAME DATA FOR THE 3 FRAME FOLLOWS:

SYMMETRY = YES | SHAPE CODE = SP SPECIAL FRAMEINPUT

DEF CODE = 0 1=MIN. 2=MAX. 3=INT.

AVG BAY SPACE 25.00'

| | |
|---|---|
| NUMBER OF SUPPORTED POINTS | 5 |
| NUMBER OF SPECIAL MEMBER RELEASES | 0 |
| NUMBER OF INTERIOR COLUMNS | 3 |
| NUMBER OF MEMBERS | 17 |
| NUMBER OF CENTER LINE JOINT POINTS | 18 |

DESIGN CODE = SC STRESS CHECK FRAME

LOADING:

| | |
|---|---|
| | 3.00 ADDITIONAL DEAD LOAD |
| | 2.00 PURLINS & SHEETING |
| | 1.42 FRAME DEAD LOAD |
| TOTAL DEAD | 6.42 PSF |
| LIVE | 25.00 PSF |
| WIND | 20.54 PSF |
| SNOW | 20.00 PSF |

THIS FRAME REQUIRED ON FRAME LINES : 4, 5, 6, 7, 8,

BOUNDARY DATA:

| POINT | X-SUP | Y-SUP | M-SUP | X-DISP | | Y-DISP | | ROTATION | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 18 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 6 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 10 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |
| 14 | 1 | 1 | 0 | 0.0 | IN. | 0.0 | IN. | 0.0 | IN/IN OR RADIANS |

INTERIOR COLUMN SPACING AND LOCATION FROM BACK BUILDING LINE

| | | ELEVATION |
|---|---|---|
| SPACING 50' 0 0/16" | LOCATION 50' 0 0/16" | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 100' 0 0/16" | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 150' 0 0/16" | 0' 0 0/16" |
| SPACING 50' 0 0/16" | LOCATION 200' 0 0/16" = SPAN | |

THE FOLLOWING CLEARANCE DATA APPLIES TO FRAME NUMBER 3

VERTICAL CLEARANCE AT BACK HAUNCH 26' 9 3/ 4"
HORIZONTAL CLEARANCE BETWEEN EXTERIOR COLUMNS 193' 11 0/16"
VERTICAL CLEARANCE UNDER FRAME AT RIDGE 30' 5 1/ 2"
VERTICAL CLEARANCE AT FRONT HAUNCH 26' 9 13/16"

MEMBER DATA:

| MEM | FLANGE TK | FLANGE WIDTH | WEB TK | DEPTHS 1 | DEPTHS 2 | LENGTH (FT) | ANGLE (DEG) | WEIGHT (POUNDS) | JOINT NOS 1 | JOINT NOS 2 | FLANGE YIELDS | WEB YIELDS | KL XX (FT) | K LYY (FT) | LB (FT) | SPLICE CODES J1 | SPLICE CODES J2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FRAME SIDE 1 | | | | | | | | | | | | | | | | | |
| 1 | 3/16 | 5.0 | 1/ 8 | 12.00 | 28.00 | 28.320 | 270.000 | 431.4 | 1 | 2 | 50.0 | 42.0 | 40.26 | SET BY P&G SPACE | | BP | KN |
| FRAME SIDE 2 | | | | | | | | | | | | | | | | | |
| 2 | 1/ 4 | 5.0 | 1/ 8 | 19.00 | 19.00 | 29.378 | 182.386 | 485.7 | 2 | 3 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | KN | SS |
| 3 | 3/16 | 5.0 | 1/ 8 | 19.00 | 19.00 | 10.000 | 182.386 | 150.8 | 3 | 4 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | SS | SP |
| 4 | 5/16 | 6.0 | 3/16 | 19.00 | 34.00 | 10.422 | 182.386 | 301.1 | 4 | 5 | 50.0 | 50.0 | 47.03 | SET BY P&G SPACE | | SP | SS |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 15 LOCATED AT 50' 0 0/16" | | | | | | | | | | | | | | | | | |
| 5 | 5/16 | 6.0 | 3/16 | 34.00 | 19.00 | 9.578 | 182.386 | 293.9 | 5 | 7 | 50.0 | 50.0 | 50.08 | SET BY P&G SPACE | | SS | SP |
| 6 | 3/16 | 5.0 | 1/ 8 | 19.00 | 19.00 | 30.000 | 182.386 | 452.3 | 7 | 8 | 50.0 | 42.0 | 50.08 | SET BY P&G SPACE | | SP | SP |
| 7 | 5/16 | 7.0 | 3/16 | 19.00 | 24.00 | 10.000 | 182.386 | 285.0 | 8 | 9 | 50.0 | 50.0 | 50.08 | SET BY P&G SPACE | | SP | SS |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 16 LOCATED AT 100' 0 0/16" | | | | | | | | | | | | | | | | | |
| FRAME SIDE 3 | | | | | | | | | | | | | | | | | |
| 8 | 5/16 | 7.0 | 3/16 | 19.00 | 24.00 | 10.000 | 177.614 | 284.9 | 11 | 9 | 50.0 | 50.0 | 50.08 | SET BY P&G SPACE | | SP | SS |
| 9 | 3/16 | 5.0 | 1/ 8 | 19.00 | 19.00 | 30.000 | 177.614 | 452.3 | 12 | 11 | 50.0 | 42.0 | 50.08 | SET BY P&G SPACE | | SP | SP |
| 10 | 5/16 | 6.0 | 3/16 | 34.00 | 19.00 | 9.578 | 177.614 | 293.9 | 13 | 12 | 50.0 | 50.0 | 50.08 | SET BY P&G SPACE | | SS | SP |
| LOCATION OF INTERIOR COLUMN MEMBER NO. 17 LOCATED AT 150' 0 0/16" | | | | | | | | | | | | | | | | | |
| 11 | 5/16 | 6.0 | 3/16 | 19.00 | 34.00 | 10.422 | 177.614 | 301.1 | 15 | 13 | 50.0 | 50.0 | 47.03 | SET BY P&G SPACE | | SP | SS |
| 12 | 3/16 | 5.0 | 1/ 8 | 19.00 | 19.00 | 10.000 | 177.614 | 150.8 | 16 | 15 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | SS | SP |
| 13 | 1/ 4 | 5.0 | 1/ 8 | 19.00 | 19.00 | 29.378 | 177.614 | 485.7 | 17 | 16 | 50.0 | 42.0 | 47.03 | SET BY P&G SPACE | | KN | SS |
| FRAME SIDE 4 | | | | | | | | | | | | | | | | | |
| 14 | 3/16 | 5.0 | 1/ 8 | 12.00 | 28.00 | 28.320 | 90.000 | 431.4 | 18 | 17 | 50.0 | 42.0 | 40.26 | SET BY P&G SPACE | | BP | KN |
| INTERIOR COLUMNS FRAME SIDES 5, 6 AND 7 FOLLOW: | | | | | | | | | | | | | | | | | |
| FRAME SIDE 5 | | | | | | | | | | | | | | | | | |
| 15 | ~~5/16~~ | ~~8.5~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 27.608 | 90.000 | 745.7 | 6 | 5 | 50.0 | 50.0 | 27.61 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 6 | | | | | | | | | | | | | | | | | |
| 16 | ~~5/16~~ | ~~8.5~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 30.459 | 90.000 | 822.7 | 10 | 9 | 50.0 | 50.0 | 30.46 | SET BY P&G SPACE | | BP | SP |
| FRAME SIDE 7 | | | | | | | | | | | | | | | | | |
| 17 | ~~5/16~~ | ~~8.5~~ | ~~3/16~~ | ~~14.00~~ | ~~14.00~~ | 27.608 | 90.000 | 745.7 | 14 | 13 | 50.0 | 50.0 | 27.61 | SET BY P&G SPACE | | BP | SP |

*

SUMMARY OF REACTIONS:

| SIDE | LOAD COMBINATION | HORIZONTAL | VERTICAL | MOMENT |
|---|---|---|---|---|
| BACK | 1, 3, 0, 0, 0 | 3.33 | 17.54 | -0.00 |
| FRONT | 1, 3, 0, 0, 0 | -3.33 | 17.54 | 0.00 |
| INTERIOR COLUMN # 1 | 1, 3, 0, 0, 0 | -0.00 | 42.75 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3, 0, 0, 0 | 0.00 | 36.53 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3, 0, 0, 0 | -0.00 | 42.75 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,11,41, 0, 0 | -5.83 | -9.02 | -0.00 |
| FRONT | 1,11,41, 0, 0 | -5.31 | -2.01 | 0.00 |
| INTERIOR COLUMN # 1 | 1,11,41, 0, 0 | 0.00 | -17.78 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,11,41, 0, 0 | 0.00 | -12.76 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,11,41, 0, 0 | 0.00 | -11.02 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,23,41, 0, 0 | 5.31 | -2.01 | -0.00 |
| FRONT | 1,23,41, 0, 0 | 5.83 | -9.02 | -0.00 |
| INTERIOR COLUMN # 1 | 1,23,41, 0, 0 | 0.00 | -11.02 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,23,41, 0, 0 | -0.00 | -12.76 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,23,41, 0, 0 | 0.00 | -17.79 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,11,41, 0 | -3.13 | 4.87 | -0.00 |
| FRONT | 1, 3,11,41, 0 | -8.01 | 11.88 | 0.00 |
| INTERIOR COLUMN # 1 | 1, 3,11,41, 0 | -0.00 | 16.32 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3,11,41, 0 | 0.00 | 16.24 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3,11,41, 0 | -0.00 | 23.09 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1, 3,23,41, 0 | 8.01 | 11.88 | -0.00 |
| FRONT | 1, 3,23,41, 0 | 3.13 | 4.87 | -0.00 |
| INTERIOR COLUMN # 1 | 1, 3,23,41, 0 | -0.00 | 23.08 | 0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1, 3,23,41, 0 | -0.00 | 16.24 | 0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1, 3,23,41, 0 | -0.00 | 16.32 | 0.00 AT 150.00 FT FROM BACK BLDG. LN. |
| BACK | 1,15,18, 0, 0 | 2.26 | 14.15 | -0.00 |
| FRONT | 1,15,18, 0, 0 | -2.25 | 9.82 | -0.00 |
| INTERIOR COLUMN # 1 | 1,15,18, 0, 0 | -0.00 | 37.33 | -0.00 AT 50.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 2 | 1,15,18, 0, 0 | 0.00 | 24.93 | -0.00 AT 100.00 FT FROM BACK BLDG. LN. |
| INTERIOR COLUMN # 3 | 1,15,18, 0, 0 | -0.00 | 20.88 | -0.00 AT 150.00 FT FROM BACK BLDG. LN. |

SUMMARY OF BASE PLATES:

| SIDE | <------ BASE PLATE DATA -------> MARK NO. | WIDTH | TK | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE | BLR | WELDING PATTERN |
|---|---|---|---|---|---|---|---|---|
| BACK | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 | 4.48 | OS-3 |
| FRONT | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 | 4.48 | OS-3 |
| INTERIOR COLUMN # 1 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 8.83 | OS-3 |
| INTERIOR COLUMN # 2 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 6.34 | OS-3 |
| INTERIOR COLUMN # 3 | BP-K10315 | 13 ~~10~~.00 X | ~~3/8~~ 1/2 X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 | 8.83 | OS-3 |

WEB STIFFENER REQUIREMENTS:

| MEMBER | STIFFENER NUMBER | DESCRIPTION | LOCATION (FT) | WEB DEPTH (IN) | H/T RATIO | A/H RATIO | A (IN) | STIFFENER SIZE TK | WIDTH | SIDES | WELDING L - S | DETAIL ? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,13 | 1 | COL./HAUNCH FLG EX | 1.12 | 18.500 | | | | 3/16 X | 2 1/ 4 | BOTH | | YES |
| | 2 | INTERMEDIATE SHEAR | 3.43 | 18.500 | 137.55 | 1.50 | 27.75 | 1/ 4 X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| | 3 | INTERMEDIATE SHEAR | 7.28 | 18.500 | 137.55 | 2.50 | 46.25 | 1/ 4 X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| 3,12 | 1 | INTERMEDIATE SHEAR | 8.29 | 18.625 | 138.48 | 2.50 | 46.56 | 3/16 X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| 4,11 | 2 | INTERMEDIATE SHEAR | 8.31 | 30.942 | 165.02 | 3.00 | 92.82 | 3/16 X | 2 3/ 8 | BOTH | STD. CK-OK | YES |
| | 3 | BEARING (INT. COL) | 9.86 | 32.539 | | | | 1/ 4 X | 2 3/ 4 | BOTH | STD. CK-OK | YES |
| 5,10 | 2 | INTERMEDIATE SHEAR | 7.68 | 22.001 | 117.34 | 3.00 | 66.00 | 3/16 X | 2 3/ 8 | BOTH | STD. CK-OK | YES |
| 6, 9 | 2 | INTERMEDIATE SHEAR | 3.88 | 18.625 | 138.48 | 2.50 | 46.56 | 3/16 X | 2 3/ 8 | ONE | STD. CK-OK | YES |
| 7, 8 | 2 | BEARING (INT. COL) | 9.96 | 23.354 | | | | 3/16 X | 3 1/ 4 | BOTH | STD. CK-OK | YES |

BOLTED CONNECTION DATA:

| MEMBER | J T # | PLATE DATA TK | WD | LENGTH | BOLT DATA SIZE | OUTSIDE #ROWS | OUTSIDE 4-BOLT | INSIDE #ROWS | INSIDE 4-BOLT | TYPE | MARK # | CONNECTION CAPACITY OUTSIDE | INSIDE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1, 14 | 2 | 3/ 8 X | 6.0 X | 2'- 5 0/16 | 3/4" DIA A325 | 5 | NO | 5 | NO | EXT | 3B06329055 | 999.8 "K | 999.8 "K |
| 2, 13 | 1 | 3/ 8 X | 6.0 X | 2'- 4 0/16 | 3/4" DIA A325 | 5 | NO | 5 | NO | FLUSH | 3A06328055 | 999.8 "K | 999.8 "K |
| 3, 12 | 2 | 4/ 8 X | 6.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 2 | NO | 1 | NO | EXT | 3B06420021 | 669.0 "K | 478.2 "K |
| 4, 11 | 1 | 4/ 8 X | 6.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 2 | NO | 1 | NO | EXT | 3B06420021 | 669.0 "K | 478.2 "K |
| 5, 10 | 2 | 4/ 8 X | 6.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 3 | NO | 1 | NO | EXT | 3B06420031 | 826.5 "K | 478.2 "K |
| 6, 9 | 1 | 4/ 8 X | 6.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 3 | NO | 1 | NO | EXT | 3B06420031 | 826.5 "K | 478.2 "K |
| 6, 9 | 2 | 3/ 8 X | 6.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 2 | NO | 1 | NO | EXT | 3B06320021 | 376.3 "K | 269.0 "K |
| 7, 8 | 1 | 3/ 8 X | 7.0 X | 1'- 8 0/16 | 3/4" DIA A325 | 2 | NO | 1 | NO | EXT | 3B07320021 | 376.3 "K | 269.0 "K |
| INTERIOR | | COLUMN CONNECTION PLATES | | | | | | | | | | | |
| 15, 17 | 2 | 3/ 8 X | 9.0 X | 1'- 3 1/16 | 1/2" DIA A325 | 1 | NO | 1 | NO | EXT | 1B09315011 | 178.6 "K | 178.6 "K |
| 16, 16 | 2 | 3/ 8 X | 9.0 X | 1'- 3 0/16 | 3/4" DIA A325 | 1 | NO | 1 | NO | EXT | 3B09315011 | 212.6 "K | 212.6 "K |

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 7 | 7 | 6 | 6 | 6 | 6 | 6 |
| LOCATION | 1'- 6 0/16 | 6'- 6 0/16 | 11'- 6 0/16 | 16'- 6 0/16 | 21'- 6 0/16 | 26'- 6 0/16 | 31'- 6 0/16 |
| DEPTH @ FB | 23.2496 | 20.7497 | 18.9999 | 18.9999 | 18.9999 | 18.9996 | 18.9999 |
| FB MARK # | FB3020 | NOT REQ D | NOT REQ D | FB2110 | NOT REQ D | FB2110 | NOT REQ D |

FLANGE BRACING REQUIREMENTS:

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 6 | 5 | 5 | 4 | 4 | 3 | 3 |
| LOCATION | 36'- 6 0/16 | 41'- 6 0/16 | 46'- 6 0/16 | 51'- 6 0/16 | 56'- 6 0/16 | 61'- 6 0/16 | 66'- 6 0/16 |
| DEPTH @ FB | 18.9999 | 21.3491 | 29.1801 | 31.2336 | 24.0372 | 18.9999 | 19.0001 |
| FB MARK # | FB2110 | FB3004 | FB4024 | FB4040 | FB3024 | NOT REQ D | FB2110 |

BACK SIDE OF FRAME RIDGE TO EAVE:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MEMBER # | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| LOCATION | 71'- 6 0/16 | 76'- 6 0/16 | 81'- 6 0/16 | 86'- 6 0/16 | 91'- 6 0/16 | 95'- 7 5/ 8 | 99'- 9 1/ 4 |
| DEPTH @ FB | 19.0138 | 19.0597 | 19.1059 | 19.1518 | 19.1980 | 19.2359 | 0.0 |
| FB MARK # | NOT REQ D | FB2110 | NOT REQ D | FB2110 | NOT REQ D | FB2110 | NOT REQ D |

BACK SIDE OF FRAME BASE TO EAVE:

| | | | | |
|---|---|---|---|---|
| MEMBER # | 1 | 1 | 1 | 1 |
| LOCATION | 7'- 2 1/ 4 | 12'- 2 1/ 4 | 17'- 2 1/ 4 | 22'- 2 1/ 4 |
| DEPTH @ FB | 16.2958 | 19.2841 | 22.2725 | 25.2608 |
| FB MARK # | FB2100 | FB3000 | FB3020 | FB3044 |

SPAN = 200'-0
BACK SIDEWALL HEIGHT = 29'-0
FRONT SIDEWALL HEIGHT = 29'-0
BUILDING LENGTH = 210'-0

RIDGE FROM BACK BLDG LN= 100'-0
ELEVATION OF FRONT COL =
BACK ROOF PITCH = 0.5000 : 12
FRONT ROOF PITCH = 0.5000 : 12

THIS FRAME REQUIRED ON FRAME LINES : 4, 5, 6, 7, 8,

BAY SPACING = 25.00 FT.

LOADING: ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF (PURLINS & SHEETING) + FRAME WEIGHT = 6.42 PSF)
LIVE = 25.00 PSF
WIND = 20.54 PSF
SNOW = 20.00 PSF

THE ABOVE LOADS COMBINED WITH ANY SPECIAL LOADS APPEAR IN 6 LOAD CASES AS DESCRIBED BELOW:

| LOAD CODES | DESCRIPTION | | | | STRESS FACTORS |
|---|---|---|---|---|---|
| 1, 3, 0, 0, 0 DEAD LOAD | LIVE LOAD | | | | 1.00 |
| 1,11,41, 0, 0 DEAD LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | | | 1.33 |
| 1,23,41, 0, 0 DEAD LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | | | 1.33 |
| 1, 3,11,41, 0 DEAD LOAD | LIVE LOAD | MBMA WIND BACK 1981 | MBMA EP SUCTION | | 1.33 |
| 1, 3,23,41, 0 DEAD LOAD | LIVE LOAD | MBMA WIND FRONT 1981 | MBMA EP SUCTION | | 1.33 |
| 1,15,18, 0, 0 DEAD LOAD | SNOW BACK TO RIDGE | 1/2 SNOW FRT TO RIDG | | | 1.00 |

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| BACK SW COL | 1, 3, 0, 0, 0 | - | 3.33 | - | 17.54 | 0.00 |
| | 1,11,41, 0, 0 | 5.83 | - | 9.02 | - | 0.00 |
| | 1,23,41, 0, 0 | - | 5.31 | 2.01 | - | 0.00 |
| | 1, 3,11,41, 0 | 3.13 | - | - | 4.87 | 0.00 |
| | 1, 3,23,41, 0 | - | 8.01 | - | 11.88 | 0.00 |
| | 1,15,18, 0, 0 | - | 2.26 | - | 14.15 | 0.00 |
| FRONT SW COL | 1, 3, 0, 0, 0 | - | 3.33 | - | 17.54 | -0.00 |
| | 1,11,41, 0, 0 | - | 5.31 | 2.01 | - | -0.00 |
| | 1,23,41, 0, 0 | 5.83 | - | 9.02 | - | 0.00 |
| | 1, 3,11,41, 0 | - | 8.01 | - | 11.88 | -0.00 |
| | 1, 3,23,41, 0 | 3.13 | - | - | 4.87 | 0.00 |
| | 1,15,18, 0, 0 | - | 2.25 | - | 9.82 | 0.00 |
| INT COL # 1 | 1, 3, 0, 0, 0 | - | - | - | 42.75 | -0.00 AT 50.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 17.78 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 11.02 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 16.32 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 23.08 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 37.33 | 0.00 |

BAY SPACING = 25.00 FT.

SUMMARY OF FOUNDATION LOADS:
1. FORCE=KIPS MOMENT=INCH-KIPS

| SIDE | LOAD COMBINATION | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|---|
| INT COL # 2 | 1, 3, 0, 0, 0 | - | - | - | 36.53 | 0.00 AT 100.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 12.76 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 12.76 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 16.24 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 16.24 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 24.93 | 0.00 |
| INT COL # 3 | 1, 3, 0, 0, 0 | - | - | - | 42.75 | 0.00 AT 150.00' FROM BACK BLDG LINE |
| | 1,11,41, 0, 0 | - | - | 11.02 | - | 0.00 |
| | 1,23,41, 0, 0 | - | - | 17.79 | - | -0.00 |
| | 1, 3,11,41, 0 | - | - | - | 23.09 | 0.00 |
| | 1, 3,23,41, 0 | - | - | - | 16.32 | -0.00 |
| | 1,15,18, 0, 0 | - | - | - | 20.88 | 0.00 |

MAXIMUM FOUNDATION LOADS:
1. MAX FOUNDATION LOADS CAN BE FROM ANY LOAD CASE
2. MAX FOUNDATION LOADS ARE NOT FACTORED FOR ANY LOAD CASE

| SIDE | HORIZONTAL IN | HORIZONTAL OUT | VERTICAL UPLIFT | VERTICAL DOWN | MOMENT (+ COUNTERCLOCKWISE) |
|---|---|---|---|---|---|
| BACK SW COL | 5.83 | 8.01 | 9.02 | 17.54 | -0.00 |
| FRONT SW COL | 5.83 | 8.01 | 9.02 | 17.54 | -0.00 |
| INT COL # 1 | - | - | 17.79 | 42.75 | 0.00 AT 50.00' FROM BACK BLDG LINE |
| INT COL # 2 | - | - | 12.76 | 36.53 | -0.00 AT 100.00' FROM BACK BLDG LINE |
| INT COL # 3 | - | - | 17.79 | 42.75 | 0.00 AT 150.00' FROM BACK BLDG LINE |

SUMMARY OF BASE PLATES:

| SIDE | <------- BASE PLATE DATA -------> MARK NO. | WIDTH | TK | LENGTH | <------ ANCHOR BOLT DATA ------> NUMBER | SIZE |
|---|---|---|---|---|---|---|
| BACK | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 |
| FRONT | BP-B08313 | 8.00 X | 3/8 X | 13.00 | (4) | 3/4 DIA. A36 |
| INTERIOR COLUMN # 1 | BP-K10315 13 | ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 |
| INTERIOR COLUMN # 2 | BP-K10315 13 | ~~10~~.00 X | ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 |
| INTERIOR COLUMN # 3 | BP-K10315 13 | ~~10~~.00 X | (1/2 ~~3/8~~ X | ~~15~~.00 13 | (4) | 3/4 DIA. A36 |

<><><><><><><><> CONTINUOUS BEAM SYSTEM ANALYSIS - INPUT DATA <><><><><><><><>

RUN DATE: 8/31/84 TIME: 9:44

REMARKS: 38852 KJR

LINE 1 INPUT:

| NUMBR SPANS | ALLOWABLE BND STRSS | INPT TYPE | LOAD TYPE | ROOF-OVERHANG LEFT | RIGHT |
|---|---|---|---|---|---|
| 16 | 30.0 | 3 | 1 | 1.00 | 1.00 |

STRUCTURE INPUT:

| S# | -SPAN- | NMF | SIZE | GAGE | XL(1) | IX(1) | SX(1) | XL(2) | IX(2) | SX(2) | XL(3) | IX(3) | SX(3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24.00 | 2 | 4 | 14 | 22.00 | 11.44 | 2.69 | 2.00 | 20.49 | 4.80 | 0.0 | 0.0 | 0.0 |
| 2 | 25.00 | 3 | 6 | 16 | 3.50 | 20.49 | 4.80 | 19.50 | 9.05 | 2.11 | 2.00 | 18.10 | 4.22 |
| 3 | 25.00 | 3 | 6 | 16 | 2.00 | 18.10 | 4.22 | 21.00 | 9.05 | 2.11 | 2.00 | 18.10 | 4.22 |
| 4 | 25.00 | 3 | 6 | 16 | 2.00 | 18.10 | 4.22 | 21.00 | 9.05 | 2.11 | 2.00 | 18.10 | 4.22 |
| 5 | 25.00 | 3 | 6 | 16 | 2.00 | 16.10 | 4.22 | 21.00 | 9.05 | 2.11 | 2.00 | 19.22 | 4.50 |
| 6 | 25.00 | 3 | 5 | 15 | 2.00 | 19.22 | 4.50 | 20.50 | 10.17 | 2.39 | 2.50 | 23.98 | 5.64 |
| 7 | 30.00 | 3 | 3 | 13 | 2.00 | 23.98 | 5.64 | 25.50 | 13.81 | 3.25 | 2.50 | 27.62 | 6.50 |
| 8 | 30.00 | 3 | 3 | 13 | 2.50 | 27.62 | 6.50 | 25.00 | 13.81 | 3.25 | 2.50 | 27.62 | 6.50 |
| 9 | 29.00 | 3 | 3 | 13 | 2.50 | 27.62 | 6.50 | 24.00 | 13.81 | 3.25 | 2.50 | 27.62 | 6.50 |
| 10 | 30.00 | 3 | 3 | 13 | 2.50 | 27.62 | 6.50 | 25.50 | 13.81 | 3.25 | 2.00 | 23.98 | 5.64 |
| 11 | 25.00 | 3 | 5 | 15 | 2.50 | 23.98 | 5.64 | 20.50 | 10.17 | 2.39 | 2.00 | 19.22 | 4.50 |
| 12 | 25.00 | 3 | 6 | 16 | 2.00 | 19.22 | 4.50 | 21.00 | 9.05 | 2.11 | 2.00 | 18.10 | 4.22 |
| 13 | 25.00 | 3 | 6 | 16 | 2.00 | 18.10 | 4.22 | 21.00 | 9.05 | 2.11 | 2.00 | 18.10 | 4.22 |
| 14 | 25.00 | 3 | 6 | 16 | 2.00 | 18.10 | 4.22 | 21.00 | 9.05 | 2.11 | 2.00 | 18.10 | 4.22 |
| 15 | 25.00 | 3 | 6 | 16 | 2.00 | 18.10 | 4.22 | 19.50 | 9.05 | 2.11 | 3.50 | 20.49 | 4.80 |
| 16 | 24.00 | 2 | 4 | 14 | 2.00 | 20.49 | 4.80 | 22.00 | 11.44 | 2.69 | 0.0 | 0.0 | 0.0 |

<><><><><><><><><><> CONTINUOUS BEAM SYSTEM ANALYSIS - OUTPUT <><><><><><><><><><>

ALLOWABLE LOAD = 0.1546 KIPS PER FOOT LOCATION 11 1

SUPPORTS

| ## | REACTION | MOMENT | SHEAR,LEFT | SHEAR,RIGHT |
|---|---|---|---|---|
| 1 | 1.57 | -0.9 | 0.15 | -1.41 |
| 2 | 4.34 | -128.6 | -2.30 | -2.04 |
| 3 | 3.73 | -96.2 | -1.83 | -1.91 |
| 4 | 3.89 | -104.4 | -1.96 | -1.93 |
| 5 | 3.89 | -104.4 | -1.93 | -1.96 |
| 6 | 3.75 | -97.2 | -1.91 | -1.84 |
| 7 | 4.25 | -124.7 | -2.02 | -2.23 |
| 8 | 4.79 | -158.1 | -2.41 | -2.37 |
| 9 | 4.47 | -138.6 | -2.27 | -2.21 |
| 10 | 4.66 | -150.3 | -2.28 | -2.38 |
| 11 | 4.29 | -126.9 | -2.25 | -2.03 |
| 12 | 3.74 | -96.7 | -1.83 | -1.91 |
| 13 | 3.89 | -104.5 | -1.96 | -1.93 |
| 14 | 3.89 | -104.4 | -1.93 | -1.96 |
| 15 | 3.73 | -96.2 | -1.91 | -1.83 |
| 16 | 4.34 | -128.6 | -2.04 | -2.30 |
| 17 | 1.57 | -0.9 | -1.41 | 0.15 |

<><><><><><><><><><> CONTINUOUS BEAM SYSTEM ANALYSIS - OUTPUT <><><><><><><><><><>

CRITICAL SECTION SUMMARY

| SPAN | FBSX1 | FBSX2 | FBSX3 | FBSX4 | FBSX5 | FBSX6 |
|---|---|---|---|---|---|---|
| 1 | 80.7 | 80.7 | 144.0 | 144.0 | 80.7 | 80.7 |
| 2 | 63.3 | 63.3 | 63.3 | 126.6 | 144.0 | 144.0 |
| 3 | 63.3 | 63.3 | 63.3 | 126.6 | 126.6 | 126.6 |
| 4 | 63.3 | 63.3 | 63.3 | 126.6 | 126.6 | 126.6 |
| 5 | 63.3 | 63.3 | 63.3 | 135.0 | 126.6 | 126.6 |
| 6 | 71.7 | 71.7 | 71.7 | 169.2 | 135.0 | 135.0 |
| 7 | 97.5 | 97.5 | 97.5 | 195.0 | 169.2 | 169.2 |
| 8 | 97.5 | 97.5 | 97.5 | 195.0 | 195.0 | 195.0 |
| 9 | 97.5 | 97.5 | 97.5 | 195.0 | 195.0 | 195.0 |
| 10 | 97.5 | 97.5 | 97.5 | 169.2 | 195.0 | 195.0 |
| 11 | 71.7 | 71.7 | 71.7 | 135.0 | 169.2 | 169.2 |
| 12 | 63.3 | 63.3 | 63.3 | 126.6 | 135.0 | 135.0 |
| 13 | 63.3 | 63.3 | 63.3 | 126.6 | 126.6 | 126.6 |
| 14 | 63.3 | 63.3 | 63.3 | 126.6 | 126.6 | 126.6 |
| 15 | 63.3 | 63.3 | 63.3 | 144.0 | 126.6 | 126.6 |
| 16 | 80.7 | 80.7 | 80.7 | 80.7 | 144.0 | 144.0 |

| SPAN | -M1- | -M2- | -M3- | -M4- | -M5- | -M6- |
|---|---|---|---|---|---|---|
| 1 | -77.1 | 76.5 | -128.6 | -128.6 | -0.9 | -0.9 |
| 2 | -54.2 | 33.0 | -56.1 | -96.2 | -128.6 | -128.6 |
| 3 | -54.2 | 44.7 | -61.1 | -104.4 | -96.2 | -96.2 |
| 4 | -61.7 | 40.6 | -61.7 | -104.4 | -104.4 | -104.4 |
| 5 | -61.1 | 44.2 | -55.1 | -97.2 | -104.4 | -104.4 |
| 6 | -56.7 | 34.3 | -69.8 | -124.7 | -97.2 | -97.2 |
| 7 | -75.0 | 67.7 | -91.5 | -158.1 | -124.7 | -124.7 |
| 8 | -92.7 | 60.5 | -76.5 | -138.6 | -158.1 | -158.1 |
| 9 | -78.2 | 50.6 | -87.8 | -150.3 | -138.6 | -138.6 |
| 10 | -84.6 | 70.3 | -76.5 | -126.9 | -150.3 | -150.3 |
| 11 | -71.7 | 33.6 | -56.4 | -96.7 | -126.9 | -126.9 |
| 12 | -54.6 | 44.4 | -61.2 | -104.5 | -96.7 | -96.7 |
| 13 | -61.8 | 40.5 | -61.7 | -104.4 | -104.5 | -104.5 |
| 14 | -61.1 | 44.7 | -54.2 | -96.2 | -104.4 | -104.4 |
| 15 | -56.1 | 33.0 | -54.2 | -128.6 | -96.2 | -96.2 |
| 16 | -77.1 | 76.5 | -0.9 | -0.9 | -128.6 | -128.6 |

| SPAN | SRT1 | SRT2 | SRT3 | SRT4 | SRT5 | SRT6 | -XVO- |
|---|---|---|---|---|---|---|---|
| 1 | 0.96 | 0.95 | 0.89 | 0.89 | 0.01 | 0.01 | 9.1 |
| 2 | 0.86 | 0.52 | 0.89 | 0.76 | 0.89 | 0.89 | 13.2 |
| 3 | 0.86 | 0.71 | 0.96 | 0.82 | 0.76 | 0.76 | 12.3 |
| 4 | 0.98 | 0.64 | 0.97 | 0.82 | 0.82 | 0.82 | 12.5 |
| 5 | 0.97 | 0.70 | 0.87 | 0.72 | 0.82 | 0.82 | 12.7 |
| 6 | 0.79 | 0.48 | 0.97 | 0.74 | 0.72 | 0.72 | 11.9 |
| 7 | 0.77 | 0.69 | 0.94 | 0.81 | 0.74 | 0.74 | 14.4 |
| 8 | 0.95 | 0.62 | 0.78 | 0.71 | 0.81 | 0.81 | 15.3 |
| 9 | 0.80 | 0.52 | 0.90 | 0.77 | 0.71 | 0.71 | 14.3 |
| 10 | 0.87 | 0.72 | 0.78 | 0.75 | 0.77 | 0.77 | 15.4 |
| 11 | 1.00 | 0.47 | 0.79 | 0.72 | 0.75 | 0.75 | 13.2 |
| 12 | 0.86 | 0.70 | 0.97 | 0.83 | 0.72 | 0.72 | 12.3 |
| 13 | 0.98 | 0.64 | 0.98 | 0.82 | 0.83 | 0.83 | 12.5 |
| 14 | 0.96 | 0.71 | 0.86 | 0.76 | 0.82 | 0.82 | 12.7 |
| 15 | 0.89 | 0.52 | 0.86 | 0.89 | 0.76 | 0.76 | 11.8 |
| 16 | 0.96 | 0.95 | 0.01 | 0.01 | 0.89 | 0.89 | 14.9 |

<><><><><><><><><> CONTINUOUS BEAM SYSTEM ANALYSIS - OUTPUT <><><><><><><><><>

ZERO MOMENT LOCATIONS (FEET FROM LEFT SUPPORT)

| SPAN | -1- | -2- | -3- | -4- | -5- |
|---|---|---|---|---|---|
| 1 | 0.05 | 18.21 | | | |
| 2 | 7.23 | 19.17 | | | |
| 3 | 5.38 | 19.26 | | | |
| 4 | 5.89 | 19.11 | | | |
| 5 | 5.75 | 19.56 | | | |
| 6 | 5.82 | 17.99 | | | |
| 7 | 5.86 | 22.94 | | | |
| 8 | 7.27 | 23.43 | | | |
| 9 | 6.89 | 21.67 | | | |
| 10 | 6.72 | 24.13 | | | |
| 11 | 7.14 | 19.17 | | | |
| 12 | 5.41 | 19.25 | | | |
| 13 | 5.90 | 19.11 | | | |
| 14 | 5.74 | 19.62 | | | |
| 15 | 5.83 | 17.77 | | | |
| 16 | 5.79 | 23.95 | | | |

BACK EAVE PURLINS

SIMPLE PURLIN SYSTEM
GAGE YIELD STRESS - 50.00 KSI
ALLOWABLE BENDING STRESS - 30.00 KSI
PURLIN SPACING - 2.35 FT
LOADING:

ADD'L DEAD = 3.00 PSF ( TOTAL DEAD LOAD = ADD'L DEAD + 2 PSF FOR PURLINS & SHEETING)
LIVE = 25.00 PSF
WIND = 20.54 PSF

6 LOAD CASES WITH THE FOLLOWING LOAD CODES:
| 1, 3, 0, 0, 0 | 1,11,41, 0, 0 | 1,23,41, 0, 0 | 1, 3,11,41, 0 | 1, 3,23,41, 0 |

| 1,15,18, 0, 0 |

| BAY 1 - ~~26~~ 29.00' | BAY 2 - 30.00' | BAY 3 - 25.00' | BAY 4 - 25.00' | |
|---|---|---|---|---|
| 12 BSW<br>13 FSW | 13 | 13<br>~~15~~ | 13 FSW<br>15 BSW | GAGE |
| 3.25 | 3.25 | 2.39 | 2.39 | SX MOMENT |
| 88.9 | 95.3 | 66.2 | 66.2 | 1 |
| -55.1 | -59.1 | -41.1 | -41.1 | 2 |
| -55.1 | -59.1 | -41.1 | -41.1 | 3 |
| 18.9 | 20.3 | 14.1 | 14.1 | 4 |
| 18.9 | 20.3 | 14.1 | 14.1 | 5 |
| 14.8 | 15.9 | 11.0 | 11.0 | 6 |
| 0.91 AT 14.50 FT<br>-2.73 | 0.98 AT 15.00 FT<br>-3.15 | 0.92 AT 12.50 FT<br>-2.06 | 0.92 AT 12.50 FT<br>-2.06 | MAX STRESS D |

BACK EAVE PURLINS

| BAY 5 - 25.00' | BAY 6 - 25.00' | BAY 7 - 25.00' | BAY 8 - 24.00' | |
|---|---|---|---|---|
| B ~~15~~ | 15 | B FOW 15 BSW | 16 | GAGE |
| 2.39 | 2.39 | 2.39 | 2.11 | SX |
| 66.2 | 66.2 | 66.2 | 60.8 | MOMENT 1 |
| -41.1 | -41.1 | -41.1 | -37.7 | 2 |
| -41.1 | -41.1 | -41.1 | -37.7 | 3 |
| 14.1 | 14.1 | 14.1 | 12.9 | 4 |
| 14.1 | 14.1 | 14.1 | 12.9 | 5 |
| 11.0 | 11.0 | 11.0 | 10.1 | 6 |
| 0.92 AT 12.50 FT<br>-2.06 | 0.92 AT 12.50 FT<br>-2.06 | 0.92 AT 12.50 FT<br>-2.06 | 0.96 AT 12.00 FT<br>-1.95 | MAX STRESS D |

No. _____
Page _____ of _____
Date _____
Prepared by _____
Reviewed by _____

# VARCO PRUDEN PANEL RIB ENGINEERING DATA

1.) Total Layout -- 43 1/8"

2.) Total Cover -- 36"

3.) Galvanizing is 1.25 ounces per square foot

4.) Yield Stress for Steel is 50,000 psi

5.) Section Properties

| Gage | t | *wt/sq. foot of cover | Top of Rib in Compression | | Top of Rib in Tension | |
|---|---|---|---|---|---|---|
| | | | Sx | Ix | Sx | Ix |
| | in. | lbs. | in. 3 | in. 4 | in. 3 | in. 4 |
| 26 | 0.0217 | 1.08 | 0.0451 | 0.0419 | 0.0493 | 0.0419 |
| 24 | 0.0279 | 1.40 | 0.0623 | 0.0565 | 0.0644 | 0.0554 |
| 22 | 0.0339 | 1.69 | 0.0798 | 0.0710 | 0.0804 | 0.0703 |

(2) 8.5 Gage Section Properties

| Gage | Area | SxEFF | Q | Wt/Ft | Bk.P./Ft | Full Section Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Ix | Sx | Rx | Iy | Sy | Ry |
| 16 | 1.70 | 4.06 | 0.58 | 5.80 | 1.24 | 17.90 | 4.22 | 3.24 | 1.87 | 0.75 | 1.05 |
| 15 | 1.90 | 4.68 | 0.62 | 6.52 | 1.34 | 20.04 | 4.72 | 3.24 | 2.15 | 0.86 | 1.06 |
| 14 | 2.14 | 5.28 | 0.65 | 7.24 | 1.51 | 22.48 | 5.28 | 3.24 | 2.45 | 0.98 | 1.07 |
| 13 | 2.58 | 6.36 | 0.69 | 8.70 | 1.82 | 27.04 | 6.36 | 3.24 | 3.07 | 1.23 | 1.09 |
| 12 | 2.96 | 7.22 | 0.74 | 10.14 | 2.12 | 30.66 | 7.22 | 3.22 | 3.44 | 1.38 | 1.08 |
| 11 | 3.40 | 8.24 | 0.77 | 11.60 | 2.42 | 35.02 | 8.24 | 3.21 | 4.06 | 1.62 | 1.09 |

Section Properties
8.5" - Light Gage Z Shapes

| Section | Lip Angle | Theoretical Lip Depth | Thick (In) | Radius of Bend | Gage | Full Area In) 2 | Eff Sx (In) 3 | Full Sx (In) 3 | Full Ix (In) 4 | Rx (In) | Full Sy (In) 3 | Full Iy (In) 4 | ry (In) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.5Z16 | 45 | 0.61" | 0.060 | 0.3125 | 16 | 0.85 | 2.11 | 2.13 | 9.05 | 3.26 | 0.38 | 1.09 | 1.13 |
| 8.5Z15 | 45 | 0.66" | 0.067 | 0.3125 | 15 | 0.96 | 2.39 | 2.39 | 10.17 | 3.26 | 0.43 | 1.27 | 1.15 |
| 8.5Z14 | 45 | 0.71" | 0.075 | 0.3125 | 14 | 1.08 | 2.69 | 2.69 | 11.44 | 3.26 | 0.50 | 1.48 | 1.17 |
| 8.5Z13 | 45 | 0.79" | 0.090 | 0.3125 | 13 | 1.30 | 3.25 | 3.25 | 13.81 | 3.25 | 0.62 | 1.87 | 1.20 |
| 8.5Z12 | 45 | 0.86" | 0.105 | 0.3125 | 12 | 1.53 | 3.81 | 3.81 | 16.18 | 3.25 | 0.75 | 2.29 | 1.22 |
| 8.5Z11 | 45 | 0.93" | 0.12" | 0.3125 | 11 | 1.76 | 4.37 | 4.37 | 18.56 | 3.25 | 0.88 | 2.75 | 1.25 |

8.5" - Light Gage C Shapes

| Section | Lip Angle | Theoretical Lip Depth | Thick (In) | Radius of Bend | Gage | Full Area (In) 2 | Eff Sx (In) 3 | Full Sx (In) 3 | Full Ix (In) 4 | Rx (In) | Full Sy (In) 4 | Full Iy (In) 4 | ry (In) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.5C16 | 90 | 0.54" | 0.060 | 0.0938 | 16 | 0.85 | 2.03 | 2.11 | 8.95 | 3.25 | 0.33 | 0.62 | 0.86 |
| 8.5C15 | 90 | 0.58" | 0.067 | 0.0938 | 15 | 0.95 | 2.34 | 2.36 | 10.02 | 3.25 | 0.38 | 0.71 | 0.86 |
| 8.5C14 | 90 | 0.62" | 0.075 | 0.0938 | 14 | 1.07 | 2.64 | 2.64 | 11.24 | 3.25 | 0.43 | 0.80 | 0.87 |
| 8.5C13 | 90 | 0.70" | 0.090 | 0.0938 | 13 | 1.29 | 3.18 | 3.18 | 13.52 | 3.24 | 0.53 | 0.99 | 0.88 |
| 8.5C12 | 90 | 0.71" | 0.105 | 0.1875 | 12 | 1.48 | 3.61 | 3.61 | 15.33 | 3.22 | 0.59 | 1.10 | 0.86 |
| 8.5C11 | 90 | 0.77" | 0.120 | 0.1875 | 11 | 1.70 | 4.12 | 4.12 | 17.51 | 3.21 | 0.69 | 1.28 | 0.87 |