



# PROYECTO CENTRO DE SERVICIO INFONAVIT (CESI), GOMEZ PALACIO.

Proyecto Ejecutivo – Memoria de Cálculo de  
Estructuras.

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ARCHITECTURE >  
PROJECT>



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## 1 INTRODUCCIÓN Y OBJETIVO.

Los Centros de Servicio INFONAVIT (CESI), son oficinas que brindan atención personalizada sobre trámites y servicios relativos al crédito y al ahorro de los trabajadores derechohabientes, establecidos en diversos lugares o plazas en los que se requiere la presencia institucional en todo el país.

El proyecto CESI Gómez Palacio, con una superficie de terreno de 3000. m<sup>2</sup> de oficinas (1 nivel de oficinas + estacionamiento). Se encuentra localizado en Lote 10 fracc. b-2 calzada Carlos Herrera Arauce, Ejido Emiliano Zapata, Municipio de Gómez Palacio.

El objetivo de la presente memoria es describir la estructuración al igual que los parámetros de diseño para el edificio que será destinado para el uso de oficinas, así como sus diferentes áreas de uso de reunión, cuartos de servicio de acuerdo a la información proporcionada por el cliente y la normatividad vigente.

## 2 DESCRIPCIÓN GENERAL DEL PROYECTO.

Compuesto por un predio de forma rectangular y topografía plana. Con base a la constancia de alineamiento las medidas generales son las siguientes, al Norte colinda con el Lote 10 de Fraccionamiento B-3, al este con la Calzada Carlos Herrera Arauce, al oeste con Lote 10 de Fraccionamiento C y al Sur con el Lote 10 de Fraccionamiento B-1.



*Fig. 1 Localización del emplazamiento del "CESI Gómez Palacio".*



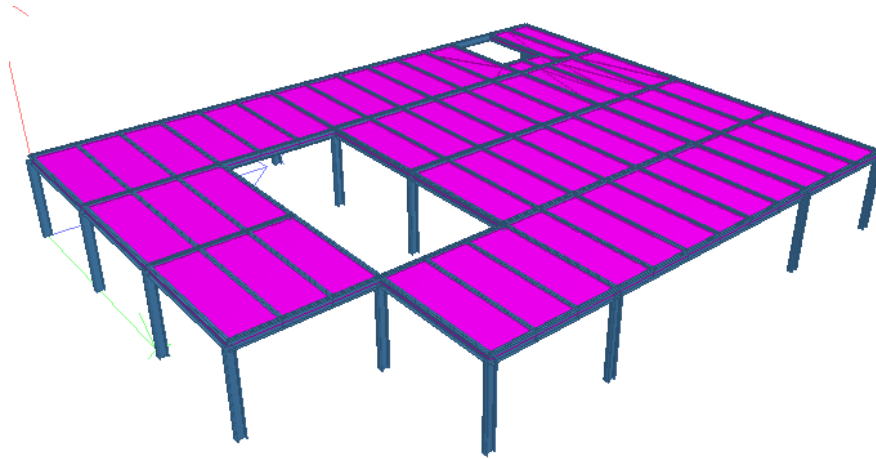
### 3 MODELO MATEMATICO.

Para el diseño de los elementos estructurales, se utilizara el programa de cómputo correspondiente, el cual contara con las herramientas necesarias para estos fines. Se realizó un modelo matemático tridimensional idealizando columnas y trabes mediante el elemento barra.

Las cargas gravitacionales (Carga Muerta y Carga Viva) se consideraron como cargas uniformemente repartidas en las trabes de cada nivel y el peso propio de la estructura es calculado directamente por el programa de análisis al declararle el comando self weight a todos los elementos que conforman el modelo.

Para el análisis sísmico, los sistemas de piso (losas) se consideraron como diafragmas rígidos y se realizó un análisis dinámico modal-espectral tomando en cuenta las recomendaciones establecidas en las Normas Técnicas Complementarias para Diseño por Sismo del Reglamento de Construcciones para el Distrito Federal.

En la figura siguiente se muestra una vista tridimensional del modelo de análisis descrito en párrafos anteriores.



Isométrico de Modelo de CESI.

### 4 REGLAMENTOS Y MANUALES EMPLEADOS.

Para el diseño del análisis y diseño estructural en cuestión, se han tomado en cuenta los reglamentos nacionales e internacionales mencionados a continuación:

- Reglamento de Construcciones del Distrito Federal. (R.C.D.F.), Edición 2004
- Normas Técnicas Complementarias para el Diseño por Sismo. (N.T.C.D.S.)
- Normas Técnicas Complementarias sobre Criterios y Acciones para el Diseño Estructural de las Edificaciones. (N.T.C.C.A.D.E.E.)
- Normas Técnicas Complementarias para Diseño y Construcción de Estructuras Metálicas. (N.T.C.D.C.E.M.)
- Normas Técnicas Complementarias para Diseño y Construcción de Cimentaciones. (N.T.C.D.C.C.)
- Manual de Construcción en Acero IMCA.



- Manual de Diseño de Obras Civiles Diseño por Sismo. (M.D.O.C.D.S.)
- American Concrete Institute (ACI), Edición ACI 318-11.
- American Institute of Steel Construction. (AISC-LRFD)

## **5 MATERIALES.**

### **5.1 CONCRETO.**

Concreto estructural Clase I, con peso volumétrico de  $2400 \text{ kg/cm}^3$  y resistencia a la compresión a los 28 días de  $f'c= 250 \text{ kg/cm}^2$ . Módulo de  $E= 242487.1 \text{ kg/cm}^2$ . Con agregados pétreos de un máximo de 2.0 cm de diámetro.

### **5.2 ACERO DE REFUERZO Y ANCLAS.**

El acero de refuerzo, con esfuerzo de fluencia  $f_y= 4200 \text{ kg/cm}^2$ . Módulo de elasticidad  $E= 2040000 \text{ kg/cm}^2$ . Conforme a la designación A615 grado 60 de la ASTM.

Anclas ASTM A-36.

### **5.3 ACERO ESTRUCTURAL.**

Acero estructural ASTM A-50 con esfuerzo de fluencia  $f_y= 3515 \text{ kg/cm}^2$  y módulo de elasticidad  $E= 2040000 \text{ kg/cm}^2$ .

### **5.4 TORNILLOS**

Tornillos estructurales deberán ser A-325 de alta resistencia.

### **5.5 SOLDADURA.**

Electrodo serie E-70XX con resistencia a la tracción de 70 KSI ( $49.2 \text{ kg/mm}^2$ ). Se aplicaran criterios de acuerdo a lo establecido en AWS D1.1.



## 6 ANÁLISIS DE CARGAS.

Se evaluarán las cargas de acuerdo a lo establecido en el R.C.D.F. de acuerdo a su ocupación o actividad de la edificación, en este caso la estructura será destinada para oficinas por lo que se tienen las siguientes cargas:

De acuerdo al R.C.D.F. en su Art. 186 se deben considerar tres categorías de acciones de acuerdo con la duración en que obran la estructura con intensidad máxima, siendo estas:

- Acciones Permanentes.
- Acciones Variables.
- Acciones Accidentales.

### 6.1 ACCIONES PERMANENTES.

#### 6.1.1 CARGAS MUERTAS.

De acuerdo al Artículo 160 del Reglamento de Construcciones del Distrito Federal (R.C.D.F.) se considerarán como Carga Muerta los pesos de todos los elementos estructurales, de los acabados y de todos los elementos que ocupan una posición permanente y tienen un peso que no cambia sustancialmente con el tiempo.

##### Entrepiso

- Losacero 229 kg/m<sup>2</sup>
- Muros divisorios 60 kg/m<sup>2</sup>
- Acabado 40 kg/m<sup>2</sup>
- Instalaciones 30 kg/m<sup>2</sup>
- Sobrecarga 40 kg/m<sup>2</sup>

TOTAL = 399 kg/m<sup>2</sup>

##### Azotea

- Losacero 229 kg/m<sup>2</sup>
- Relleno 90 kg/m<sup>2</sup>
- Equipos 80 kg/m<sup>2</sup>
- Instalaciones 30 kg/m<sup>2</sup>
- Sobrecarga 40 kg/m<sup>2</sup>

TOTAL = 469 kg/m<sup>2</sup>



## 6.2 ACCIONES VARIABLES.

### 6.2.1 CARGAS VIVAS.

De acuerdo al Artículo 161 Reglamento de Construcciones del Distrito Federal (R.C.D.F.) se considerarán como Cargas Vivas las fuerzas que se producen por el uso y ocupación de las edificaciones y que no tienen carácter permanente. A menos que se justifiquen racionalmente otros valores, estas cargas se tomarán iguales a las especificadas en las Normas Técnicas Complementarias sobre Criterios y Acciones para el Diseño Estructural de las Edificaciones (N.T.C.C.A.D.E.E).

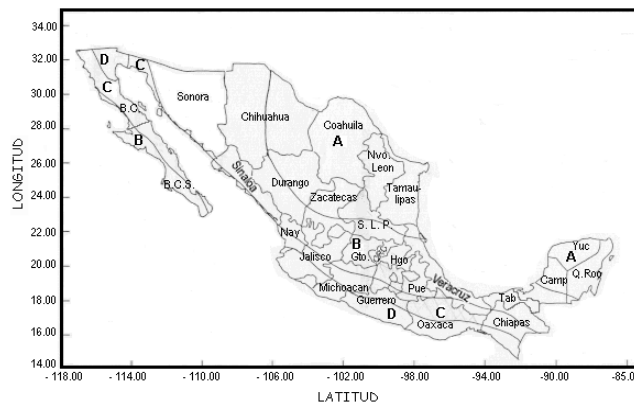
Destino de piso o cubierta.	Carga Viva Máxima ( $W_m$ )	Carga Viva Instantánea ( $W_a$ )
	Kg/m <sup>2</sup>	Kg/m <sup>2</sup>
Oficinas	250	180
Azotea pendiente < 5%	100	70

## 7 ANALISIS SISMICO.

Se realizó un análisis dinámico modal en base a los parámetros obtenidos y proporcionados por el Estudio de Mecánica de Suelos, con tres grados de libertad en cada nivel con el objeto de tomar en cuenta los desplazamientos horizontales en dos direcciones ortogonales.

Los parámetros del análisis es el siguiente:

- Clasificación de la estructura según su uso ..... Grupo B
- Zona Sísmica ..... A
- Clasificación del suelo ..... Tipo II
- Coeficiente sísmico .....  $c = 0.24$
- Factor de comportamiento sísmico .....  $Q = 2$



Regionalización Sísmica de la Republica Mexicana.



Espectro de diseño:

$$a = a_0 + (c - a_0)(T/T_a) \quad \text{para } T \text{ menor que } T_a$$

$$a = c \quad \text{para } T \text{ entre } T_a \text{ y } T_b$$

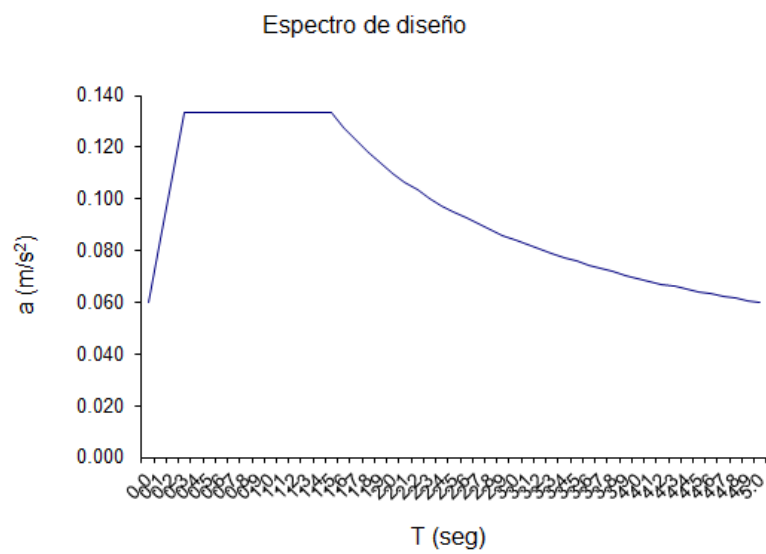
$$a = qc \quad \text{para } T \text{ mayor que } T_b$$

$$q = (T_b/T)^r$$

$$a_0 = 0.06$$

$$T_a = 0.30 \text{ seg} ; T_b = 1.5 \text{ seg}$$

$$r = 2/3$$







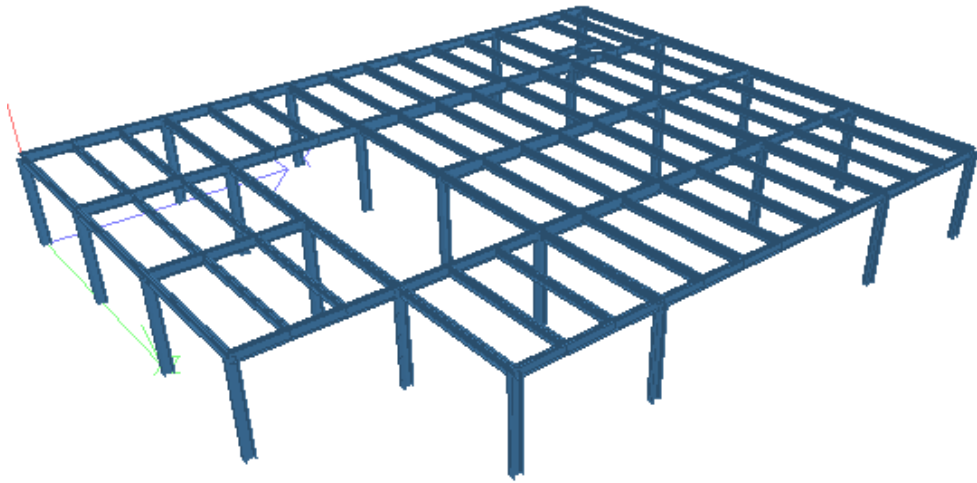
## 8 COMBINACIONES DE ACCIONES.

La seguridad de una estructura deberá verificarse para el combinado de todas las acciones que tengan una probabilidad no despreciable de ocurrir simultáneamente.

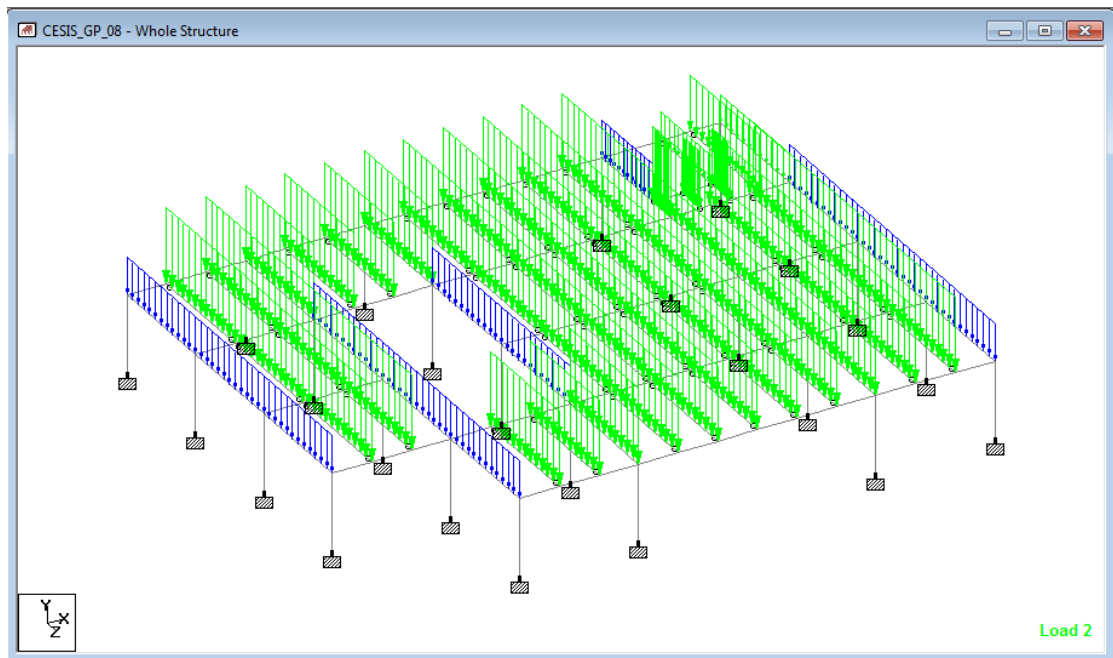
COMBINACIONES DE SERVICIO
1.0 (PP+CM + CV Max.)
1.0 (PP+CM + CV Inst. + Sx +0.3 Sz)
1.0 (PP+CM + CV Inst. + Sx - 0.3 Sz)
1.0 (PP+CM + CV Inst. - Sx + 0.3 Sz)
1.0 (PP+CM + CV Inst. - Sx - 0.3 Sz)
1.0 (PP+CM + CV Inst. + 0.3 Sx + Sz)
1.0 (PP+CM + CV Inst. + 0.3 Sx - Sz)
1.0 (PP+CM + CV Inst. - 0.3 Sx + Sz)
1.0 (PP+CM + CV Inst. - 0.3 Sx - Sz)
COMBINACIONES DE DISEÑO
1.4 (PP+CM + CV Max.)
1.1 (PP+CM + CV Inst. + Sx +0.3 Sz)
1.1 (PP+CM + CV Inst. + Sx - 0.3 Sz)
1.1 (PP+CM + CV Inst. - Sx + 0.3 Sz)
1.1 (PP+CM + CV Inst. - Sx - 0.3 Sz)
1.1 (PP+CM + CV Inst. + 0.3 Sx + Sz)
1.1 (PP+CM + CV Inst. + 0.3 Sx - Sz)
1.1 (PP+CM + CV Inst. - 0.3 Sx + Sz)
1.1 (PP+CM + CV Inst. - 0.3 Sx - Sz)



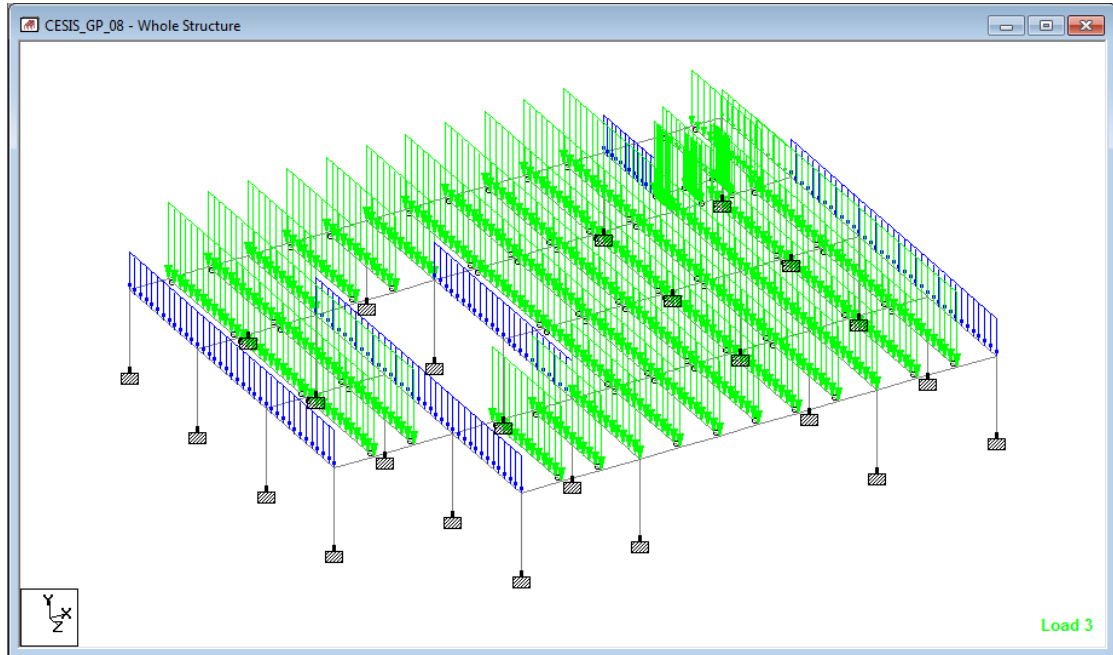
## 9 ANALISIS ESTRUCTURAL.



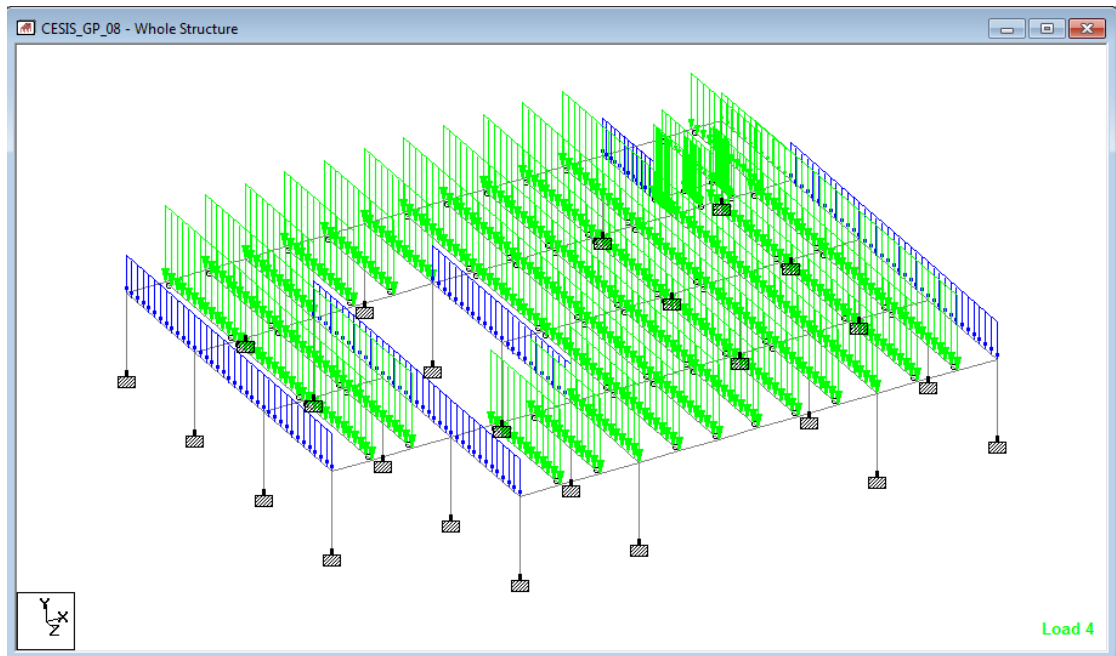
Estructuración de CESI.



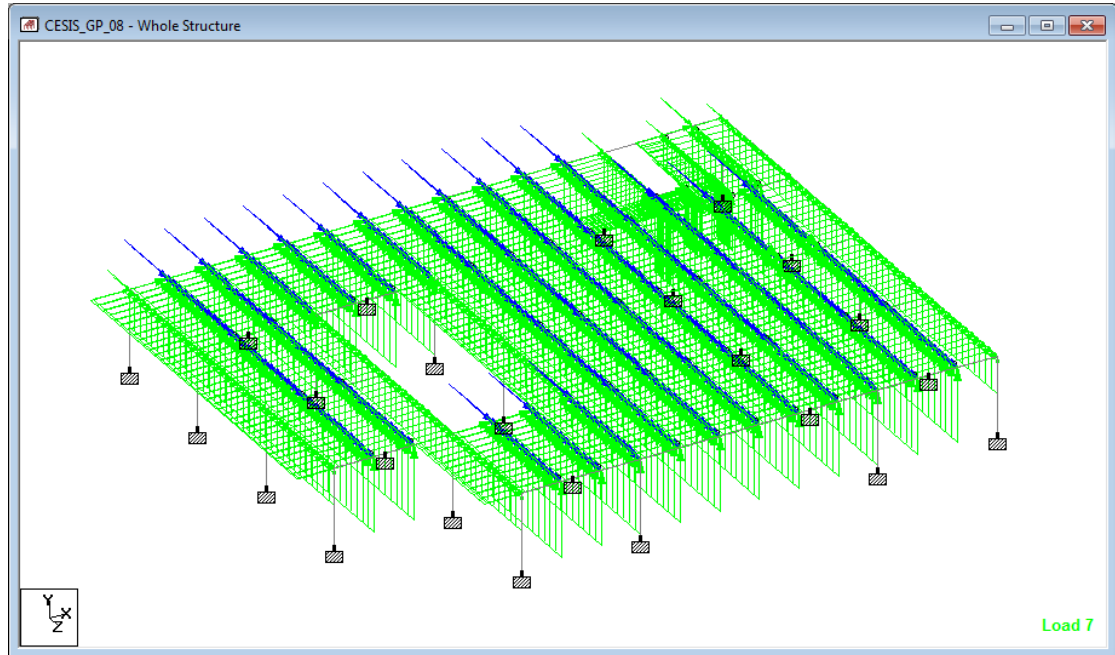
Carga Muerta.



Carga Viva Máxima.



Carga Viva Instantánea.



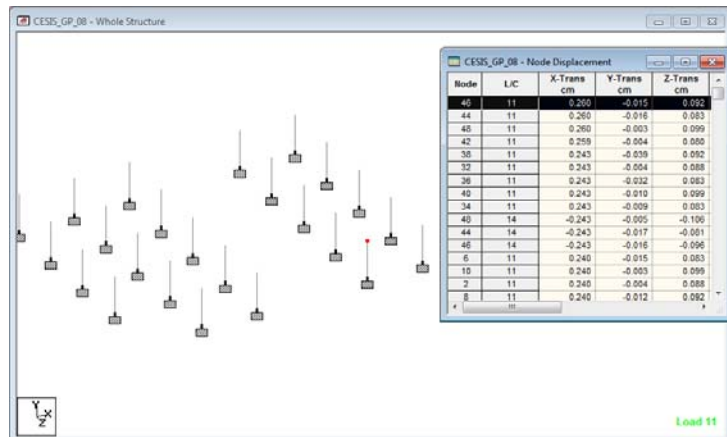
Carga de Sismo.

## 10 REVISION DE DESPLAZAMIENTOS.

Se revisará que los desplazamientos laterales cumplan con las limitaciones que marque el R.C.D.F. 2004 ( $0.006H < \Delta < 0.012H$ ).

Los elementos no estructurales que formen parte de la estructura deberán desligarse adecuadamente.

### Dirección X

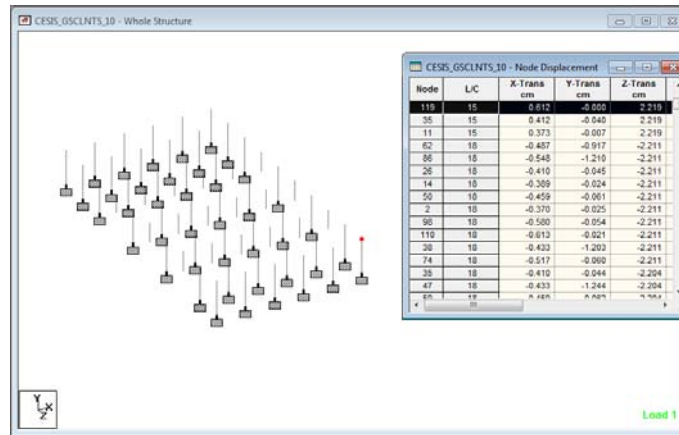


$$\Delta_{adm} = 0.012 \times h = 0.012 \times 390 \text{ cm} = 4.68 \text{ cm}$$

$$\Delta_{real} = 0.26 \text{ cm} \times 2 = 0.52 \text{ cm} < \Delta_{adm} ; \text{O.k.}$$



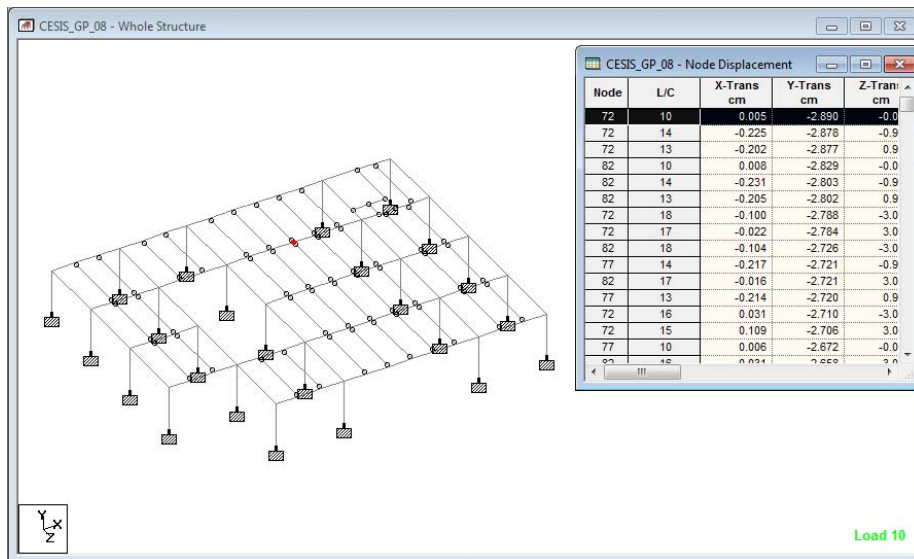
### Dirección Z



$$\Delta \text{ adm} = 0.012 \times h = 0.012 \times 390 \text{ cm} = \mathbf{4.68 \text{ cm}}$$

$$\Delta \text{ real} = 0.301 \text{ cm} \times 2 = \mathbf{.602 \text{ cm}} < \Delta \text{ adm} ; \mathbf{O.k.}$$

Los desplazamientos verticales (deflexiones en vigas) también deberán cumplir con el mismo reglamento y con las normas que rijan en los casos especiales que así se requieran.

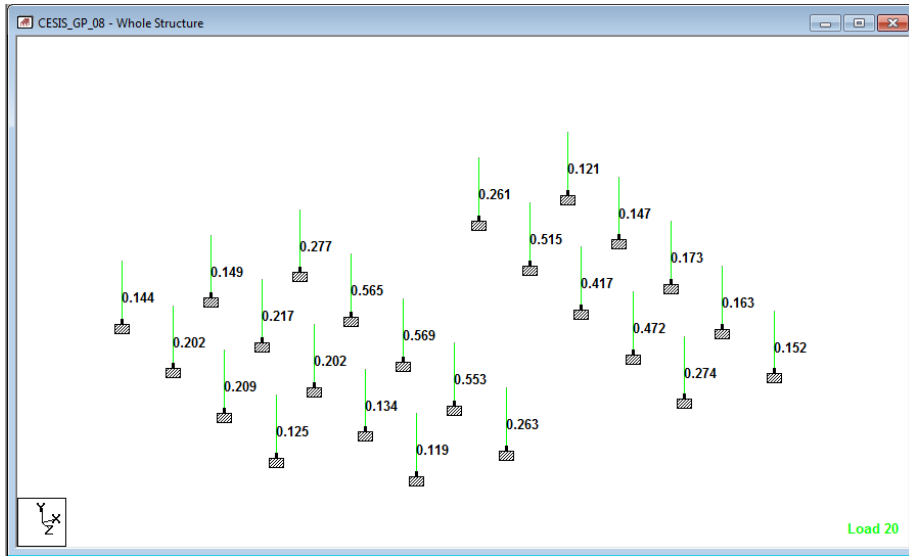


$$\Delta \text{ adm} = (L / 240) + 0.5 \text{ cm} = (1200 / 240) + 0.5 \text{ cm} = \mathbf{5.5 \text{ cm}}$$

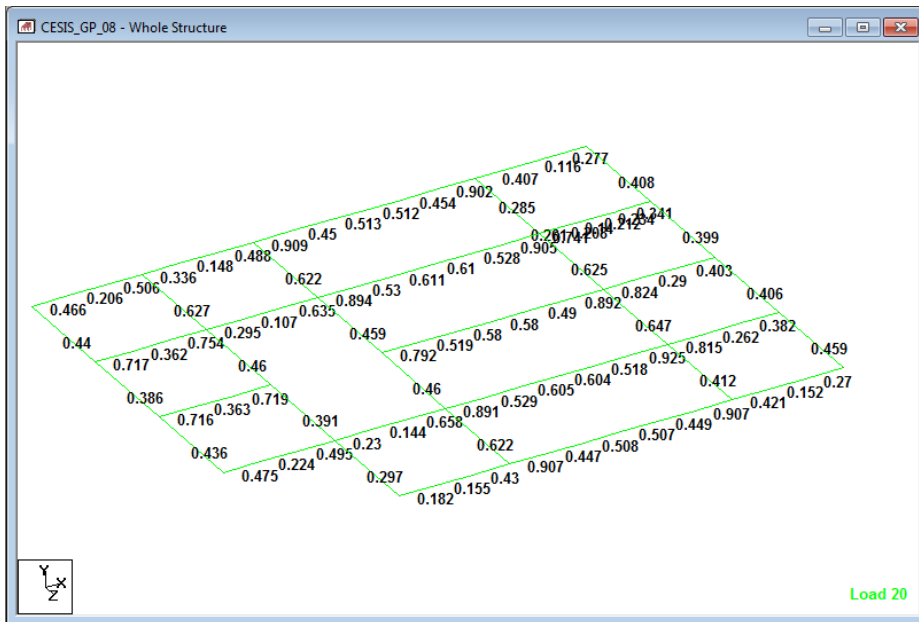
$$\Delta = \mathbf{2.89 \text{ cm}} < \Delta \text{ adm} ; \mathbf{O.k.}$$



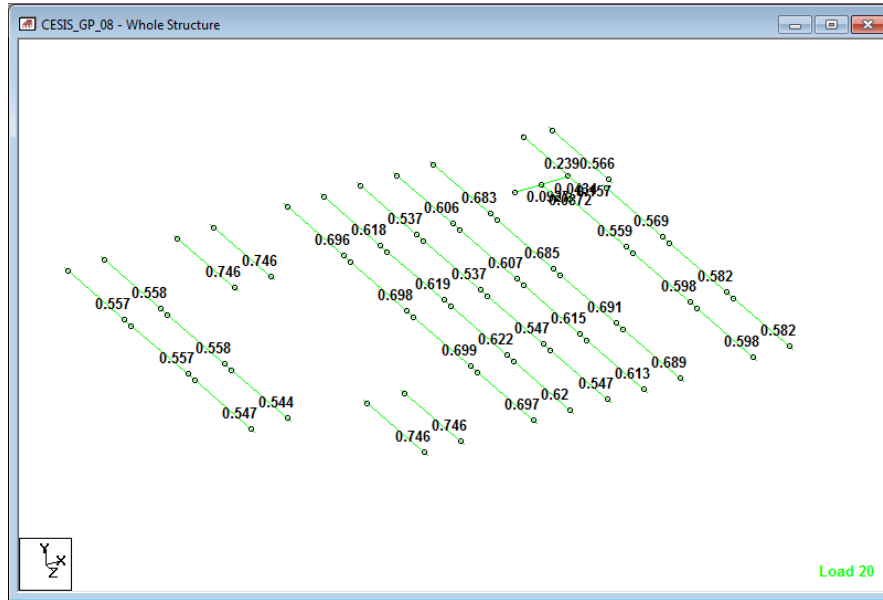
## 11 REVISION DE ESFUERZOS EN ELEMENTOS ESTRUCTURALES



Esfuerzos en columnas.



Esfuerzos en vigas principales.



Esfuerzos en vigas secundarias.

## 12 DISEÑO DE ELEMENTOS ESTRUCTURALES.

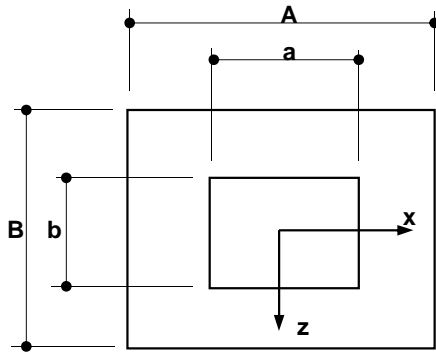
Se diseñarán los elementos de la estructura de acuerdo con los lineamientos vigentes del R.C.D.F., así como las N.TC.-2004 con las combinaciones de carga aplicando los efectos de sismo,

**DISEÑO DE ZAPATA AISLADA**  
MEMORIA DE CALCULO

PROYECTO : CESI GOMEZ PALACIO  
ELEMENTO : Z-1

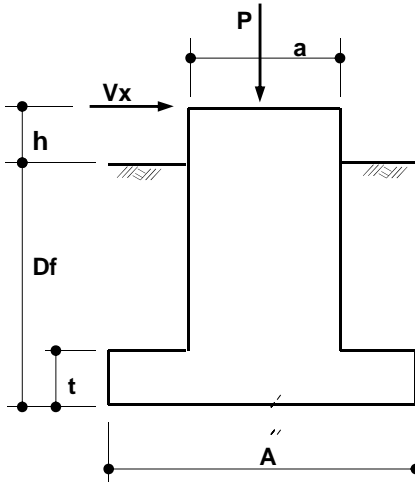
DOCUMENTO No.  
CI.02  
SECCION: ESTRUCTURAS  
FECHA: 22/09/2017  
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**GEOMETRIA DE LA ZAPATA**



**PLANTA DE CIMENTACIÓN**

Df =	<b>1.80</b>	m
h =	<b>0.20</b>	m
t =	<b>0.35</b>	m
A =	<b>3.40</b>	m
B =	<b>3.40</b>	m
a =	<b>0.65</b>	m
b =	<b>0.65</b>	m
q ad =	<b>14.73</b>	ton/m <sup>2</sup>
γs =	<b>1.69</b>	ton/m <sup>3</sup>



**ELEVACION DE CIMENTACIÓN**

A =	<b>11.56</b>	m <sup>2</sup>
Sx =	<b>6.55</b>	m <sup>3</sup>
Sz =	<b>6.55</b>	m <sup>3</sup>

**REFERENCIAS**

**COMBINACIONES DE CARGA**

**REACCIONES**

Cargas sin Factorizar

Revisión esfuerzos en el terreno

P =	<b>18.70</b>	ton
Mx =	<b>-1.69</b>	ton·m
Mz =	<b>-15.84</b>	ton·m
Fx =	<b>8.25</b>	ton
Fz =	<b>-0.92</b>	ton

Cargas Factorizadas

Diseño estructural de zapata

P =	<b>20.57</b>	ton
Mx =	<b>-2.16</b>	ton·m
Mz =	<b>-17.43</b>	ton·m
Fx =	<b>9.07</b>	ton
Fz =	<b>-1.01</b>	ton



**DISEÑO DE ZAPATA AISLADA**  
MEMORIA DE CALCULO

PROYECTO : CESI GOMEZ PALACIO  
ELEMENTO : Z-1

DOCUMENTO No.  
CI.02  
SECCION: ESTRUCTURAS  
FECHA: 22/09/2017  
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**REFERENCIAS**

**ACCIONES**

Revisión esfuerzos en el terreno

P = -18.70 ton  
Mx = 1.69 ton·m  
Mz = 15.84 ton·m  
Fx = -8.25 ton  
Fz = 0.92 ton

Diseño estructural de zapata

P = -20.57 ton  
Mx = 2.16 ton·m  
Mz = 17.43 ton·m  
Fx = -9.07 ton  
Fz = 1.01 ton

$M_x = (F_z \cdot (D_f + h)) + M_x$   
 $M_z = (-F_x \cdot (D_f + h)) + M_z$

**ELEMENTOS MECÁNICOS**

Revisión esfuerzos en el terreno

P = 18.70 ton  
Mx = 3.53 ton·m  
Mz = 32.34 ton·m  
Fx = 8.25 ton  
Fz = 0.92 ton

Diseño estructural de zapata

P = 20.57 ton  
Mx = 4.18 ton·m  
Mz = 35.57 ton·m  
Fx = 9.07 ton  
Fz = 1.01 ton

**MOMENTO RESISTENTE**

ELEMENTO	PESO (para rev. de esfuerzos)	PESO (para diseño de zapata)
DADO	1.67 ton	1.67 ton
ZAPATA	9.71 ton	9.71 ton
RELLENO	27.29 ton	27.29 ton
AXIAL (P)	18.70 ton	20.57 ton
<b>TOTAL=</b>	<b>57.38 ton</b>	<b>59.25 ton</b>

Mrx = 97.54 ton·m  
Mrz = 97.54 ton·m

**REVISIÓN CONTRA VOLTEO**

**En eje X**

Mrx = 97.54 ton·m  
Mx = 3.53 ton·m  
 $F_{vol} \leq (Mrx / M_x)$   
1.5 < 27.63 **Correcto**

**En eje Z**

Mrz = 97.54 ton·m  
Mz = 32.34 ton·m  
 $F_{vol} \leq (Mrz / M_z)$   
1.5 < 3.02 **Correcto**

**DISEÑO DE ZAPATA AISLADA**  
MEMORIA DE CALCULO

PROYECTO : CESI GOMEZ PALACIO  
ELEMENTO : Z-1

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**TIPO DE CASO PARA EL DIAGRAMA DE PRESIONES**

ex=Mz/Peso= 0.56 m  
ez=Mx/Peso= 0.06 m  
F = B/2-ez = 1.64 m  
E = A/2 -ex = 1.14 m  
A = 3.40 m  
B = 3.40 m  
E/A = 0.33 m  
F/B = 0.48 m

CASO TIPO : II  
CON LOS VALORES OBTENIDOS DE E/A Y F/B SE ENTRA A LA GRAFICA 8-19A(d) Y DEPENDIENDO DEL AREA DONDE SE INTERSECTEN SERA EL TIPO DE CASO

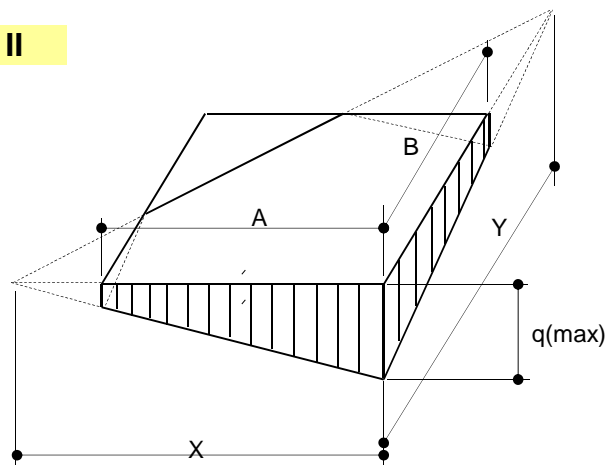
**CASO I No aplica**

$$q_{rev} = \frac{\text{Peso}}{AB} (1 + \frac{6ez}{B}) = q_{rev} < q_{ad} \quad \text{ton/m}^2$$

Esfuerzo factorizado para Diseño

$$q_{dis} = \frac{\text{Peso}}{AB} (1 + \frac{6ez}{B}) =$$

**CASO II**



SE UTILIZA EL METODO DE PRUEBA Y ERROR, EN EL CUAL SE UTILIZA PRIMERAMENTE LA GRAFICA SUPERIOR ENTRANDO CON LOS VALORES DE A/X=1 Y F/B (YA OBTENIDO), ENCONTRANDO B/Y; AHORA EN LA GRAFICA DE ABAJO SE ENTRA CON ESE VALOR OBTENIDO DE B/Y Y EL VALOR DE E/A (YA OBTENIDO), ENCONTRANDO A/X; REGRESANDO A LA GRAFICA SUPERIOR SE ENTRA AHORA CON EL VALOR OBTENIDO DE A/X Y DE NUEVO EL VALOR DE F/B, SE OBTIENE B/Y, POR ULTIMO DE NUEVO EN LA GRAFICA DE ABAJO CON B/Y Y E/A ENCONTRAMOS A/X

INICIANDO CON (A/X)1 = 1.00 F/B = 0.48 (B/Y)1 = 0.12 SE OBTIENE  
AHORA PARA (B/Y)1 = 0.12 E/A = 0.33 (A/X)2 = 0.88 SE OBTIENE

**REFERENCIAS**

EL TIPO DE CASO SE OBTIENE DE LA FIGURA 8-19A (d) DEL LIBRO "FOUNDATIONS OF STRUCTURES" DE CLARENCE W. DUNHAM

DIAGRAMA DE PRESIONES PARA CASO II FIG. 8-19B DEL LIBRO "FOUNDATIONS OF STRUCTURES" DE CLARENCE W. DUNHAM

UTILIZANDO EL METODO Y GRAFICA DE LA FIG. 8-19A DEL LIBRO FOUNDATIONS OF STRUCTURES DE CLARENCE W. DUNHAM, SE OBTUVIERON LOS VALORES DE X, Y

**DISEÑO DE ZAPATA AISLADA**  
MEMORIA DE CALCULO

PROYECTO : CESI GOMEZ PALACIO  
ELEMENTO : Z-1

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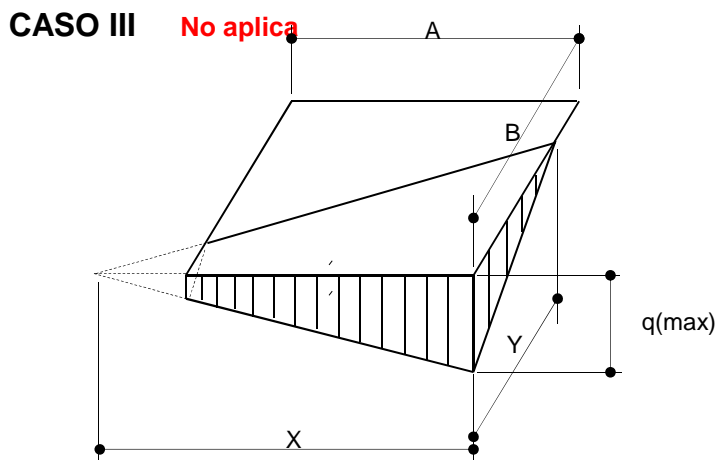
**REFERENCIAS**

AHORA PARA  $(A/X)^2 = 0.88$   $F/B = 0.48$   $(B/Y)^2 = 0.13$  SE OBTIENE  
AHORA PARA  $(B/Y)^2 = 0.13$   $E/A = 0.33$   $(A/X)^3 = 0.90$  SE OBTIENE  
 $X = 26.15$   
 $Y = 3.78$

$q_{rev} = 6 \cdot P / ((XY(1-(1-B/Y)^3)-(1-(A/X)^3)) = 10.23 < 14.73 \text{ ton/m}^2$   
 $q_{rev} < q_{ad}$  Correcto

Esfuerzo factorizado para Diseño

$q_{dis} = 6 \cdot P / ((XY(1-(1-B/Y)^3)-(1-(A/X)^3)) = 10.57$



SE UTILIZA EL METODO DE PRUEBA Y ERROR, EN EL CUAL SE UTILIZA PRIMERAMENTE LA GRAFICA SUPERIOR ENTRANDO CON LOS VALORES DE  $A/X=1$  Y  $F/B$  (YA OBTENIDO), ENCONTRANDO  $B/Y$ ; AHORA EN LA GRAFICA DE ABAJO SE ENTRA CON ESE VALOR OBTENIDO DE  $B/Y$  Y EL VALOR DE  $E/A$  (YA OBTENIDO), ENCONTRANDO  $A/X$

INICIANDO CON  $(A/X)^1 =$   $F/B =$   $(B/Y)^1 =$  SE OBTIENE  
AHORA PARA  $(B/Y)^1 =$   $E/A =$   $(A/X)^2 =$  SE OBTIENE  
 $X =$

$\frac{Y}{X} = \frac{3 \times F}{X - E}$   $Y = \frac{3 \times F \times X}{X - E}$   $Y =$

$q_{rev} = 6 \cdot P / ((XY(1-(1-(A/X)^3)) =$   $q_{rev} < q_{ad}$   $\text{ton/m}^2$

Esfuerzo factorizado para Diseño

$q_{dis} = 6 \cdot P / ((XY(1-(1-(A/X)^3)) =$

DIAGRAMA DE PRESIONES PARA CASO III FIG. 8-19B DEL LIBRO "FOUNDATIONS OF STRUCTURES" DE CLARENCE W. DUNHAM

UTILIZANDO EL METODO Y GRAFICA DE LA FIG. 8-19A DEL LIBRO "FOUNDATIONS OF STRUCTURES" DE CLARENCE W. DUNHAM, SE OBTUVIERON LOS VALORES DE X, Y

**DISEÑO DE ZAPATA AISLADA**  
MEMORIA DE CALCULO

PROYECTO : CESI GOMEZ PALACIO  
ELEMENTO : Z-1

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**REFERENCIAS**

**PRESIÓN DE CONTACTO CON CARGAS FACTORIZADAS**

q dis max = 10.57 ton/m<sup>2</sup>

**DISEÑO DE LA ZAPATA**

ω1 = PESO DE LA LOSA DE LA ZAPATA =	0.84	ton/m <sup>2</sup>
ω2 = PESO DEL TERRENO SOBRE LA LOSA =	2.45	ton/m <sup>2</sup>
ω = PRESION MAXIMA DE DISEÑO =	7.28	ton/m <sup>2</sup>
L = LONGITUD DEL VOLADO DE LA ZAPATA =	1.38	m
Mu = MOMENTO ULTIMO DE DISEÑO = ωL <sup>2</sup> /2 =	6.88	ton·m
Vu = CORTANTE ULTIMO DE DISEÑO = ωl	10.00	ton

$$\rho = \frac{0.85f'c}{fy} \left(1 - \sqrt{1 - \frac{2Rn}{0.85f'c}}\right) \quad Rn = \frac{Mu}{\phi b d^2}$$

r = RECUBRIMIENTO DEL ACERO DE REFUERZO =	5	cm
d = PERALTE EFECTIVO DE LA LOSA =	30	cm
b = ANCHO DEL FRANJA DE LOSA =	100	cm
φ = FACTOR DE REDUCCION DE RESIST. A LA FLEXION =	0.90	
f'c = RESISTENCIA A LA COMPRESION DEL CONCRETO =	250	kg/cm <sup>2</sup>
fy = LIMITE DE FLUENCIA DELACERO DE REFUERZO =	4200	kg/cm <sup>2</sup>
as = AREA DE UNA VARILLA DEL No. 5 =	1.99	cm <sup>2</sup>
Rn =	8.49129	
PORCENTAJE DE ACERO DE REFUERZO =	0.00206	%
14.5/fy (CAPITULO 10.5 DEL ACI-318) =	0.00345	%
RIGE =	0.00345	
As(min) = ACERO DE REFUERZO MINIMO POR FLEXION =	10.36	cm <sup>2</sup> /m
VARILLAS 5 @ (ESPACIAMIENTO DE VARILLAS) =	19.21	cm
SE USARA VARILLA No. 5 @ 20		cm

**REVISIÓN POR CORTANTE COMO VIGA ANCHA**

SE DEBE CUMPLIR LO SIGUIENTE:

Vud >= f Vn		
Vn = Vc + Vs =		
Vs = 0 (NO SE CONSIDERA REFUERZO POR CORTANTE)	0	ton
φ = FACTOR DE REDUCCION DE RESIST. AL CORTANTE =	0.85	
Vc = RES. NOMINAL AL CORT. DEL CONC. =0.55(f'c) <sup>0.5</sup> (bwd) =	26.09	ton
φVc =	22.18	ton
Vu =	10.00	ton
φVc > Vu	Correcto	

**DISEÑO DE ZAPATA AISLADA**  
**MEMORIA DE CALCULO**

PROYECTO : CESI GOMEZ PALACIO  
ELEMENTO : **Z-1**

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## REVISIÓN POR PENETRACIÓN

Id = LADO DEL DADO (a) = 0.65 m  
Id = LADO DEL DADO (b) = 0.65 m  
bo = PERIMETRO CRITICO DE FALLA = PERIM. DEL DADO+4D = 3.8 m  
Vc = REIS. NOMINAL AL CORT. DEL CONC. =  $1.1(f'c)^{0.5}(bod)$  = 198 ton  
Wp = CARGA MAXIMA DE PENETRACION EN LA LOSA = 29 ton  
Vc > Wp **Correcto**

## REFERENCIAS



# ANEXO 1

```

*****
*
*          STAAD.Pro V8i SELECTseries6          *
*          Version 20.07.11.45                  *
*          Proprietary Program of              *
*          Bentley Systems, Inc.                *
*          Date=   JAN 10, 2018                 *
*          Time=   13:11: 1                     *
*
*          USER ID: Personal                    *
*****

```

1. STAAD SPACE

INPUT FILE: C:\Users\GLR\Documents\TRABAJO\CESI INFONAVIT\GOMEZ PALACIO\ANALISIS\MODELO\CESIS\_GP\_08.STD

2. START JOB INFORMATION

3. ENGINEER DATE 21-AUG-17

4. END JOB INFORMATION

5. INPUT WIDTH 79

6. UNIT METER MTON

7. JOINT COORDINATES

```

8. 1 0 0 0; 2 0 3.9 0; 3 6 0 0; 4 6 3.9 0; 5 12 0 0; 6 12 3.9 0; 7 24 0 0
9. 8 24 3.9 0; 9 30 0 0; 10 30 3.9 0; 11 0 0 6; 12 0 3.9 6; 13 6 0 6; 14 6 3.9 6
10. 15 12 0 6; 16 12 3.9 6; 17 24 0 6; 18 24 3.9 6; 19 30 0 6; 20 30 3.9 6
11. 21 0 0 12; 22 0 3.9 12; 23 6 0 12; 24 6 3.9 12; 25 12 0 12; 26 12 3.9 12
12. 27 24 0 12; 28 24 3.9 12; 29 30 0 12; 30 30 3.9 12; 31 0 0 18; 32 0 3.9 18
13. 33 6 0 18; 34 6 3.9 18; 35 12 0 18; 36 12 3.9 18; 37 24 0 18; 38 24 3.9 18
14. 39 30 0 18; 40 30 3.9 18; 41 6 0 24; 42 6 3.9 24; 43 12 0 24; 44 12 3.9 24
15. 45 24 0 24; 46 24 3.9 24; 47 30 0 24; 48 30 3.9 24; 49 2 3.9 0; 50 4 3.9 0
16. 51 2 3.9 6; 52 4 3.9 6; 53 2 3.9 12; 54 4 3.9 12; 55 2 3.9 18; 56 4 3.9 18
17. 57 8 3.9 0; 58 10 3.9 0; 59 8 3.9 6; 60 10 3.9 6; 61 8 3.9 18; 62 10 3.9 18
18. 63 8 3.9 24; 64 10 3.9 24; 65 14 3.9 0; 66 16 3.9 0; 67 18 3.9 0; 68 20 3.9 0
19. 69 22 3.9 0; 70 14 3.9 6; 71 16 3.9 6; 72 18 3.9 6; 73 20 3.9 6; 74 22 3.9 6
20. 75 14 3.9 12; 76 16 3.9 12; 77 18 3.9 12; 78 20 3.9 12; 79 22 3.9 12
21. 80 14 3.9 18; 81 16 3.9 18; 82 18 3.9 18; 83 20 3.9 18; 84 22 3.9 18
22. 85 14 3.9 24; 86 16 3.9 24; 87 18 3.9 24; 88 20 3.9 24; 89 22 3.9 24
23. 90 27 3.9 0; 91 28.5 3.9 0; 92 26 3.9 6; 93 28 3.9 6; 94 26 3.9 12
24. 95 28 3.9 12; 96 26 3.9 18; 97 28 3.9 18; 98 26 3.9 24; 99 28 3.9 24
25. 105 28.5 3.9 6; 107 27 3.9 6; 108 24 3.9 4.5; 109 27 3.9 4.5; 110 25.5 3.9 4.5
26. 111 25.5 3.9 6; 112 16.239 3.9 11.66

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27. MEMBER INCIDENCES

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28. 1 1 2; 2 3 4; 3 5 6; 4 7 8; 5 9 10; 6 11 12; 7 13 14; 8 15 16; 9 17 18
29. 10 19 20; 11 21 22; 12 23 24; 13 25 26; 14 27 28; 15 29 30; 16 31 32; 17 33 34
30. 18 35 36; 19 37 38; 20 39 40; 21 41 42; 22 43 44; 23 45 46; 24 47 48; 25 2 49
31. 26 4 57; 27 6 65; 28 8 90; 29 12 51; 30 14 59; 31 16 70; 32 18 111; 33 22 53
32. 34 26 75; 35 28 94; 36 32 55; 37 34 61; 38 36 80; 39 38 96; 40 42 63; 41 44 85
33. 42 46 98; 43 2 12; 44 12 22; 45 22 32; 46 4 14; 47 14 24; 48 24 34; 49 34 42
34. 50 6 16; 51 16 26; 52 26 36; 53 36 44; 54 8 108; 55 18 28; 56 28 38; 57 38 46
35. 58 10 20; 59 20 30; 60 30 40; 61 40 48; 62 49 50; 63 50 4; 64 51 52; 65 52 14
36. 66 53 54; 67 54 24; 68 55 56; 69 56 34; 70 50 52; 71 49 51; 72 52 54; 73 51 53
37. 74 54 56; 75 53 55; 76 57 58; 77 58 6; 78 59 60; 79 60 16; 80 61 62; 81 62 36
38. 82 63 64; 83 64 44; 84 57 59; 85 58 60; 86 61 63; 87 62 64; 88 65 66; 89 66 67

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STAAD SPACE

-- PAGE NO. 2

39. 90 67 68; 93 70 71; 94 71 72; 95 72 73; 96 73 74; 97 74 18; 98 65 70; 99 66 71  
40. 100 67 72; 101 68 73; 102 69 74; 103 75 76; 104 76 77; 105 77 78; 106 78 79  
41. 107 79 28; 108 70 75; 109 71 76; 110 72 77; 111 73 78; 112 74 79; 113 80 81  
42. 114 81 82; 115 82 83; 116 83 84; 117 84 38; 118 75 80; 119 76 81; 120 77 82  
43. 121 78 83; 122 79 84; 123 85 86; 124 86 87; 125 87 88; 126 88 89; 127 89 46  
44. 128 80 85; 129 81 86; 130 82 87; 131 83 88; 132 84 89; 135 92 107; 136 93 105  
45. 137 90 109; 138 91 105; 139 94 95; 140 95 30; 141 92 94; 142 93 95; 143 96 97  
46. 144 97 40; 145 94 96; 146 95 97; 147 98 99; 148 99 48; 149 96 98; 150 97 99  
47. 211 91 10; 212 105 20; 213 90 91; 214 107 93; 215 68 69; 216 69 8; 217 108 18  
48. 218 109 107; 219 108 110; 220 110 109; 221 111 92; 222 110 111  
49. DEFINE MATERIAL START  
50. ISOTROPIC STEEL  
51. E 2.09042E+007  
52. POISSON 0.3  
53. DENSITY 7.83341  
54. ALPHA 1.2E-005  
55. DAMP 0.03  
56. TYPE STEEL  
57. STRENGTH FY 25819.2 FU 41584 RY 1.5 RT 1.2  
58. ISOTROPIC CONCRETE  
59. E 2.21467E+006  
60. POISSON 0.17  
61. DENSITY 2.40262  
62. ALPHA 1E-005  
63. DAMP 0.05  
64. TYPE CONCRETE  
65. STRENGTH FCU 2812.28  
66. ISOTROPIC LOSA-CERO  
67. E 2.21467E+006  
68. POISSON 0.17  
69. ALPHA 1E-005  
70. DAMP 0.05  
71. TYPE CONCRETE  
72. STRENGTH FCU 2812.28  
73. END DEFINE MATERIAL  
74. MEMBER PROPERTY AMERICAN  
75. 1 TO 24 TABLE ST W14X90  
76. 25 26 28 TO 30 32 33 37 62 TO 67 76 TO 81 135 136 211 TO 214 -  
77. 221 TABLE ST W16X31  
78. 43 TO 48 50 TO 56 58 TO 61 217 TABLE ST W16X31  
79. 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 128 TO 132 137 138 141 142 -  
80. 145 146 149 150 218 TO 220 222 TABLE ST W14X30  
81. 31 34 38 93 TO 97 103 TO 107 113 TO 117 TABLE ST W21X68  
82. 27 35 36 39 TO 42 49 57 68 69 82 83 88 TO 90 123 TO 127 139 140 143 144 147 -  
83. 148 215 216 TABLE ST W16X36  
84. CONSTANTS  
85. \*BETA 90 MEMB 1 TO 24  
86. MATERIAL STEEL ALL  
87. MEMBER RELEASE  
88. 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 128 TO 132 137 138 141 142 -  
89. 145 146 149 150 222 START MX  
90. 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 128 TO 132 138 141 142 145 -  
91. 146 149 150 218 222 END MX  
92. 219 START MZ  
93. 220 END MZ  
94. SUPPORTS



STAAD SPACE

-- PAGE NO. 3

```
95. 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 FIXED
96. *DEFINE REFERENCE LOADS
97. *LOAD R1 LOADTYPE MASS TITLE REF LOAD CASE 1
98. *SELFWEIGHT Y -1
99. *****
100. *MEMBER LOAD
101. *43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY -0.469
102. *46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -
103. *128 TO 132 141 142 145 146 149 150 217 UNI GY -0.938
104. *138 218 222 UNI GY -0.704
105. *58 137 UNI GY -0.352
106. *****
107. *43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY -0.07
108. *46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -
109. *128 TO 132 141 142 145 146 149 150 217 UNI GY -0.14
110. *138 218 222 UNI GY -0.105
111. *58 137 UNI GY -0.053
112. *****
113. *JOINT LOAD
114. *94 95 FY -0.75
115. *END DEFINE REFERENCE LOADS
116. *FLOOR DIAPHRAGM
117. *DIA 1 TYPE RIG HEI 3.9
118. SLAVE ZX MASTER 112 JOINT 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 -
**WARNING- JOINT NO. 112 NOT CONNECTED. OK, IF PART OF MASTER/SLAVE.
119. 38 40 44 46 48 112
120. CUT OFF MODE SHAPE 20
121. LOAD 1 LOADTYPE DEAD TITLE PP
122. SELFWEIGHT Y -1
123. LOAD 2 LOADTYPE DEAD TITLE CM
124. MEMBER LOAD
125. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY -0.469
126. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -
127. 128 TO 132 141 142 145 146 149 150 217 UNI GY -0.938
128. 138 218 222 UNI GY -0.704
129. 58 137 UNI GY -0.352
130. LOAD 3 LOADTYPE LIVE TITLE CV MAX
131. MEMBER LOAD
132. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY -0.1
133. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -
134. 128 TO 132 141 142 145 146 149 150 217 UNI GY -0.2
135. 138 218 222 UNI GY -0.15
136. 58 137 UNI GY -0.075
137. LOAD 4 LOADTYPE LIVE TITLE CV INST
138. MEMBER LOAD
139. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY -0.07
140. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -
141. 128 TO 132 141 142 145 146 149 150 217 UNI GY -0.14
142. 138 218 222 UNI GY -0.105
143. 58 137 UNI GY -0.053
144. LOAD 5 LOADTYPE LIVE TITLE CV MEDIA
145. MEMBER LOAD
146. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY -0.015
147. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -
148. 128 TO 132 141 142 145 146 149 150 217 UNI GY -0.03
149. 138 218 222 UNI GY -0.022
```

STAAD SPACE

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150. 58 137 UNI GY -0.011  
151. LOAD 6 LOADTYPE LIVE TITLE EQUIPOS  
152. JOINT LOAD  
153. 94 95 FY -0.75  
154. LOAD 7 LOADTYPE SEISMIC TITLE SISMO X  
155. \*\*\*\*\* PP \*\*\*\*\*  
156. SELFWEIGHT X 1  
157. SELFWEIGHT Y 1  
158. SELFWEIGHT Z 1  
159. \*\*\*\*\* CM \*\*\*\*\*  
160. MEMBER LOAD  
161. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GX 0.469  
162. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -  
163. 128 TO 132 141 142 145 146 149 150 217 UNI GX 0.938  
164. 138 218 222 UNI GX 0.704  
165. 58 137 UNI GX 0.352  
166. MEMBER LOAD  
167. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY 0.469  
168. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -  
169. 128 TO 132 141 142 145 146 149 150 217 UNI GY 0.938  
170. 138 218 222 UNI GY 0.704  
171. 58 137 UNI GY 0.352  
172. MEMBER LOAD  
173. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GZ 0.469  
174. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -  
175. 128 TO 132 141 142 145 146 149 150 217 UNI GZ 0.938  
176. 138 218 222 UNI GZ 0.704  
177. 58 137 UNI GZ 0.352  
178. \*\*\*\*\*  
179. JOINT LOAD  
180. 94 95 FX 0.75  
181. JOINT LOAD  
182. 94 95 FY 0.75  
183. JOINT LOAD  
184. 94 95 FZ 0.75  
185. \*\*\*\*\* CV INST \*\*\*\*\*  
186. MEMBER LOAD  
187. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GX 0.07  
188. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -  
189. 128 TO 132 141 142 145 146 149 150 217 UNI GX 0.14  
190. 138 218 222 UNI GX 0.105  
191. 58 137 UNI GX 0.053  
192. MEMBER LOAD  
193. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GY 0.07  
194. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -  
195. 128 TO 132 141 142 145 146 149 150 217 UNI GY 0.14  
196. 138 218 222 UNI GY 0.105  
197. 58 137 UNI GY 0.053  
198. MEMBER LOAD  
199. 43 TO 45 47 TO 49 51 52 54 59 TO 61 UNI GZ 0.07  
200. 46 50 53 55 TO 57 70 TO 75 84 TO 87 98 TO 102 108 TO 112 118 TO 122 -  
201. 128 TO 132 141 142 145 146 149 150 217 UNI GZ 0.14  
202. 138 218 222 UNI GZ 0.105  
203. 58 137 UNI GZ 0.053  
204. SPECTRUM SRSS X 1 ACC SCALE 9.81 DAMP 0.05 LIN  
205. 0 0.06; 0.1 0.084; 0.2 0.109; 0.3 0.133; 0.4 0.133; 0.5 0.133; 0.6 0.133

206. 0.7 0.133; 0.8 0.133; 0.9 0.133; 1 0.133; 1.1 0.133; 1.2 0.133; 1.3 0.133  
207. 1.4 0.133; 1.5 0.133; 1.6 0.128; 1.7 0.123; 1.8 0.118; 1.9 0.114; 2 0.11  
208. 2.1 0.107; 2.2 0.103; 2.3 0.1; 2.4 0.097; 2.5 0.095; 2.6 0.092; 2.7 0.09  
209. 2.8 0.088; 2.9 0.086; 3 0.084; 3.1 0.082; 3.2 0.08; 3.3 0.079; 3.4 0.077  
210. 3.5 0.076; 3.6 0.074; 3.7 0.073; 3.8 0.072; 3.9 0.071; 4 0.069; 4.1 0.068  
211. 4.2 0.067; 4.3 0.066; 4.4 0.065; 4.5 0.064; 4.6 0.063; 4.7 0.062; 4.8 0.061  
212. 4.9 0.061; 5 0.06  
213. LOAD 8 LOADTYPE SEISMIC TITLE SISMO Z  
214. SPECTRUM SRSS Z 1 ACC SCALE 9.81 DAMP 0.05 LIN  
215. \*\*\*\*\* SERVICIO \*\*\*\*\*  
216. 0 0.06; 0.1 0.084; 0.2 0.109; 0.3 0.133; 0.4 0.133; 0.5 0.133; 0.6 0.133  
217. 0.7 0.133; 0.8 0.133; 0.9 0.133; 1 0.133; 1.1 0.133; 1.2 0.133; 1.3 0.133  
218. 1.4 0.133; 1.5 0.133; 1.6 0.128; 1.7 0.123; 1.8 0.118; 1.9 0.114; 2 0.11  
219. 2.1 0.107; 2.2 0.103; 2.3 0.1; 2.4 0.097; 2.5 0.095; 2.6 0.092; 2.7 0.09  
220. 2.8 0.088; 2.9 0.086; 3 0.084; 3.1 0.082; 3.2 0.08; 3.3 0.079; 3.4 0.077  
221. 3.5 0.076; 3.6 0.074; 3.7 0.073; 3.8 0.072; 3.9 0.071; 4 0.069; 4.1 0.068  
222. 4.2 0.067; 4.3 0.066; 4.4 0.065; 4.5 0.064; 4.6 0.063; 4.7 0.062; 4.8 0.061  
223. 4.9 0.061; 5 0.06  
224. LOAD COMB 10 1.0 (PP+CM+CVMAX+EQ)  
225. 1 1.0 2 1.0 3 1.0 6 1.0  
226. LOAD COMB 11 1.0 (PP+CM+CVINST+EQ+ SX+ 0.3 SZ)  
227. 1 1.0 2 1.0 4 1.0 6 1.0 7 1.0 8 0.3  
228. LOAD COMB 12 1.0 (PP+CM+CVINST+EQ+ SX- 0.3 SZ)  
229. 1 1.0 2 1.0 4 1.0 6 1.0 7 1.0 8 -0.3  
230. LOAD COMB 13 1.0 (PP+CM+CVINST+EQ- SX+ 0.3 SZ)  
231. 1 1.0 2 1.0 4 1.0 6 1.0 7 -1.0 8 0.3  
232. LOAD COMB 14 1.0 (PP+CM+CVINST+EQ- SX- 0.3 SZ)  
233. 1 1.0 2 1.0 4 1.0 6 1.0 7 -1.0 8 -0.3  
234. LOAD COMB 15 1.0 (PP+CM+CVINST+EQ+ 0.3 SX+ SZ)  
235. 1 1.0 2 1.0 4 1.0 6 1.0 7 0.3 8 1.0  
236. LOAD COMB 16 1.0 (PP+CM+CVINST+EQ+ 0.3 SX- SZ)  
237. 1 1.0 2 1.0 4 1.0 6 1.0 7 0.3 8 -1.0  
238. LOAD COMB 17 1.0 (PP+CM+CVINST+EQ- 0.3 SX+ SZ)  
239. 1 1.0 2 1.0 4 1.0 6 1.0 7 -0.3 8 1.0  
240. LOAD COMB 18 1.0 (PP+CM+CVINST+EQ- 0.3 SX- SZ)  
241. 1 1.0 2 1.0 4 1.0 6 1.0 7 -0.3 8 -1.0  
242. \*\*\*\*\* DISEÑO \*\*\*\*\*  
243. LOAD COMB 20 1.4 (PP+CM+CVMAX+EQ)  
244. 1 1.4 2 1.4 3 1.4 6 1.4  
245. LOAD COMB 21 1.1 (PP+CM+CVINST+EQ+ SX+ 0.33 SZ)  
246. 1 1.1 2 1.1 4 1.1 6 1.1 7 1.1 8 0.33  
247. LOAD COMB 22 1.1 (PP+CM+CVINST+EQ+ SX- 0.33 SZ)  
248. 1 1.1 2 1.1 4 1.1 6 1.1 7 1.1 8 -0.33  
249. LOAD COMB 23 1.1 (PP+CM+CVINST+EQ- SX+ 0.33 SZ)  
250. 1 1.1 2 1.1 4 1.1 6 1.1 7 -1.1 8 0.33  
251. LOAD COMB 24 1.1 (PP+CM+CVINST+EQ- SX- 0.33 SZ)  
252. 1 1.1 2 1.1 4 1.1 6 1.1 7 -1.1 8 -0.33  
253. LOAD COMB 25 1.1 (PP+CM+CVINST+EQ+ 0.33 SX+ SZ)  
254. 1 1.1 2 1.1 4 1.1 6 1.1 7 0.33 8 1.1  
255. LOAD COMB 26 1.1 (PP+CM+CVINST+EQ+ 0.33 SX- SZ)  
256. 1 1.1 2 1.1 4 1.1 6 1.1 7 0.33 8 -1.1  
257. LOAD COMB 27 1.1 (PP+CM+CVINST+EQ- 0.33 SX+ SZ)  
258. 1 1.1 2 1.1 4 1.1 6 1.1 7 -0.33 8 1.1  
259. LOAD COMB 28 1.1 (PP+CM+CVINST+EQ- 0.33 SX- SZ)  
260. 1 1.1 2 1.1 4 1.1 6 1.1 7 -0.33 8 -1.1  
261. LOAD COMB 30 1.0 (PP+CM+CVINST)

STAAD SPACE

-- PAGE NO. 6

262. 1 1.0 2 1.0 4 1.0  
263. LOAD COMB 31 1.0 (PP+CM+CVMED+EQ)  
264. 1 1.0 2 1.0 5 1.0 6 1.0  
265. LOAD COMB 32 1.0 (PP+CM+CVINST+EQ)  
266. 1 1.0 2 1.0 4 1.0 6 1.0  
267. PERFORM ANALYSIS PRINT ALL

## P R O B L E M   S T A T I S T I C S

-----

NUMBER OF JOINTS	106	NUMBER OF MEMBERS	158
NUMBER OF PLATES	0	NUMBER OF SOLIDS	0
NUMBER OF SURFACES	0	NUMBER OF SUPPORTS	24

SOLVER USED IS THE OUT-OF-CORE BASIC SOLVER

ORIGINAL/FINAL BAND-WIDTH= 94/ 9/ 423 DOF  
TOTAL PRIMARY LOAD CASES = 8, TOTAL DEGREES OF FREEDOM = 423  
TOTAL LOAD COMBINATION CASES = 21 SO FAR.  
SIZE OF STIFFNESS MATRIX = 179 DOUBLE KILO-WORDS  
REQRD/AVAIL. DISK SPACE = 15.1/ 424118.6 MB

LOADING 1 LOADTYPE DEAD TITLE PP  
-----

SELFWEIGHT Y -1.000

ACTUAL WEIGHT OF THE STRUCTURE = 37.030 MTON

LOADING 2 LOADTYPE DEAD TITLE CM  
-----

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	-0.4690 GY	0.00	6.00				
44	-0.4690 GY	0.00	6.00				
45	-0.4690 GY	0.00	6.00				
47	-0.4690 GY	0.00	6.00				
48	-0.4690 GY	0.00	6.00				
49	-0.4690 GY	0.00	6.00				
51	-0.4690 GY	0.00	6.00				
52	-0.4690 GY	0.00	6.00				
54	-0.4690 GY	0.00	4.50				
59	-0.4690 GY	0.00	6.00				
60	-0.4690 GY	0.00	6.00				
61	-0.4690 GY	0.00	6.00				
46	-0.9380 GY	0.00	6.00				
50	-0.9380 GY	0.00	6.00				
53	-0.9380 GY	0.00	6.00				
55	-0.9380 GY	0.00	6.00				
56	-0.9380 GY	0.00	6.00				
57	-0.9380 GY	0.00	6.00				
70	-0.9380 GY	0.00	6.00				
71	-0.9380 GY	0.00	6.00				
72	-0.9380 GY	0.00	6.00				
73	-0.9380 GY	0.00	6.00				
74	-0.9380 GY	0.00	6.00				
75	-0.9380 GY	0.00	6.00				
84	-0.9380 GY	0.00	6.00				
85	-0.9380 GY	0.00	6.00				
86	-0.9380 GY	0.00	6.00				
87	-0.9380 GY	0.00	6.00				
98	-0.9380 GY	0.00	6.00				
99	-0.9380 GY	0.00	6.00				
100	-0.9380 GY	0.00	6.00				
101	-0.9380 GY	0.00	6.00				
102	-0.9380 GY	0.00	6.00				
108	-0.9380 GY	0.00	6.00				
109	-0.9380 GY	0.00	6.00				
110	-0.9380 GY	0.00	6.00				
111	-0.9380 GY	0.00	6.00				
112	-0.9380 GY	0.00	6.00				

STAAD SPACE

-- PAGE NO. 8

118	-0.9380	GY	0.00	6.00
119	-0.9380	GY	0.00	6.00
120	-0.9380	GY	0.00	6.00
121	-0.9380	GY	0.00	6.00
122	-0.9380	GY	0.00	6.00
128	-0.9380	GY	0.00	6.00
129	-0.9380	GY	0.00	6.00
130	-0.9380	GY	0.00	6.00
131	-0.9380	GY	0.00	6.00
132	-0.9380	GY	0.00	6.00
141	-0.9380	GY	0.00	6.00
142	-0.9380	GY	0.00	6.00
145	-0.9380	GY	0.00	6.00
146	-0.9380	GY	0.00	6.00
149	-0.9380	GY	0.00	6.00
150	-0.9380	GY	0.00	6.00
217	-0.9380	GY	0.00	1.50
138	-0.7040	GY	0.00	6.00
218	-0.7040	GY	0.00	1.50
222	-0.7040	GY	0.00	1.50
58	-0.3520	GY	0.00	6.00
137	-0.3520	GY	0.00	4.50

LOADING 3 LOADTYPE LIVE TITLE CV MAX

-----

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	-0.1000	GY	0.00	6.00			
44	-0.1000	GY	0.00	6.00			
45	-0.1000	GY	0.00	6.00			
47	-0.1000	GY	0.00	6.00			
48	-0.1000	GY	0.00	6.00			
49	-0.1000	GY	0.00	6.00			
51	-0.1000	GY	0.00	6.00			
52	-0.1000	GY	0.00	6.00			
54	-0.1000	GY	0.00	4.50			
59	-0.1000	GY	0.00	6.00			
60	-0.1000	GY	0.00	6.00			
61	-0.1000	GY	0.00	6.00			
46	-0.2000	GY	0.00	6.00			
50	-0.2000	GY	0.00	6.00			
53	-0.2000	GY	0.00	6.00			
55	-0.2000	GY	0.00	6.00			
56	-0.2000	GY	0.00	6.00			
57	-0.2000	GY	0.00	6.00			
70	-0.2000	GY	0.00	6.00			
71	-0.2000	GY	0.00	6.00			
72	-0.2000	GY	0.00	6.00			
73	-0.2000	GY	0.00	6.00			
74	-0.2000	GY	0.00	6.00			
75	-0.2000	GY	0.00	6.00			

STAAD SPACE

-- PAGE NO. 9

84	-0.2000	GY	0.00	6.00
85	-0.2000	GY	0.00	6.00
86	-0.2000	GY	0.00	6.00
87	-0.2000	GY	0.00	6.00
98	-0.2000	GY	0.00	6.00
99	-0.2000	GY	0.00	6.00
100	-0.2000	GY	0.00	6.00
101	-0.2000	GY	0.00	6.00
102	-0.2000	GY	0.00	6.00
108	-0.2000	GY	0.00	6.00
109	-0.2000	GY	0.00	6.00
110	-0.2000	GY	0.00	6.00
111	-0.2000	GY	0.00	6.00
112	-0.2000	GY	0.00	6.00
118	-0.2000	GY	0.00	6.00
119	-0.2000	GY	0.00	6.00
120	-0.2000	GY	0.00	6.00
121	-0.2000	GY	0.00	6.00
122	-0.2000	GY	0.00	6.00
128	-0.2000	GY	0.00	6.00
129	-0.2000	GY	0.00	6.00
130	-0.2000	GY	0.00	6.00
131	-0.2000	GY	0.00	6.00
132	-0.2000	GY	0.00	6.00
141	-0.2000	GY	0.00	6.00
142	-0.2000	GY	0.00	6.00
145	-0.2000	GY	0.00	6.00
146	-0.2000	GY	0.00	6.00
149	-0.2000	GY	0.00	6.00
150	-0.2000	GY	0.00	6.00
217	-0.2000	GY	0.00	1.50
138	-0.1500	GY	0.00	6.00
218	-0.1500	GY	0.00	1.50
222	-0.1500	GY	0.00	1.50
58	-0.0750	GY	0.00	6.00
137	-0.0750	GY	0.00	4.50

LOADING 4 LOADTYPE LIVE TITLE CV INST

-----

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL		L1	L2	CON	L	LIN1	LIN2
43	-0.0700	GY	0.00	6.00				
44	-0.0700	GY	0.00	6.00				
45	-0.0700	GY	0.00	6.00				
47	-0.0700	GY	0.00	6.00				
48	-0.0700	GY	0.00	6.00				
49	-0.0700	GY	0.00	6.00				
51	-0.0700	GY	0.00	6.00				
52	-0.0700	GY	0.00	6.00				
54	-0.0700	GY	0.00	4.50				
59	-0.0700	GY	0.00	6.00				

STAAD SPACE

-- PAGE NO. 10

60	-0.0700	GY	0.00	6.00
61	-0.0700	GY	0.00	6.00
46	-0.1400	GY	0.00	6.00
50	-0.1400	GY	0.00	6.00
53	-0.1400	GY	0.00	6.00
55	-0.1400	GY	0.00	6.00
56	-0.1400	GY	0.00	6.00
57	-0.1400	GY	0.00	6.00
70	-0.1400	GY	0.00	6.00
71	-0.1400	GY	0.00	6.00
72	-0.1400	GY	0.00	6.00
73	-0.1400	GY	0.00	6.00
74	-0.1400	GY	0.00	6.00
75	-0.1400	GY	0.00	6.00
84	-0.1400	GY	0.00	6.00
85	-0.1400	GY	0.00	6.00
86	-0.1400	GY	0.00	6.00
87	-0.1400	GY	0.00	6.00
98	-0.1400	GY	0.00	6.00
99	-0.1400	GY	0.00	6.00
100	-0.1400	GY	0.00	6.00
101	-0.1400	GY	0.00	6.00
102	-0.1400	GY	0.00	6.00
108	-0.1400	GY	0.00	6.00
109	-0.1400	GY	0.00	6.00
110	-0.1400	GY	0.00	6.00
111	-0.1400	GY	0.00	6.00
112	-0.1400	GY	0.00	6.00
118	-0.1400	GY	0.00	6.00
119	-0.1400	GY	0.00	6.00
120	-0.1400	GY	0.00	6.00
121	-0.1400	GY	0.00	6.00
122	-0.1400	GY	0.00	6.00
128	-0.1400	GY	0.00	6.00
129	-0.1400	GY	0.00	6.00
130	-0.1400	GY	0.00	6.00
131	-0.1400	GY	0.00	6.00
132	-0.1400	GY	0.00	6.00
141	-0.1400	GY	0.00	6.00
142	-0.1400	GY	0.00	6.00
145	-0.1400	GY	0.00	6.00
146	-0.1400	GY	0.00	6.00
149	-0.1400	GY	0.00	6.00
150	-0.1400	GY	0.00	6.00
217	-0.1400	GY	0.00	1.50
138	-0.1050	GY	0.00	6.00
218	-0.1050	GY	0.00	1.50
222	-0.1050	GY	0.00	1.50
58	-0.0530	GY	0.00	6.00
137	-0.0530	GY	0.00	4.50

LOADING 5 LOADTYPE LIVE TITLE CV MEDIA

-----



## MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	-0.0150 GY	0.00	6.00				
44	-0.0150 GY	0.00	6.00				
45	-0.0150 GY	0.00	6.00				
47	-0.0150 GY	0.00	6.00				
48	-0.0150 GY	0.00	6.00				
49	-0.0150 GY	0.00	6.00				
51	-0.0150 GY	0.00	6.00				
52	-0.0150 GY	0.00	6.00				
54	-0.0150 GY	0.00	4.50				
59	-0.0150 GY	0.00	6.00				
60	-0.0150 GY	0.00	6.00				
61	-0.0150 GY	0.00	6.00				
46	-0.0300 GY	0.00	6.00				
50	-0.0300 GY	0.00	6.00				
53	-0.0300 GY	0.00	6.00				
55	-0.0300 GY	0.00	6.00				
56	-0.0300 GY	0.00	6.00				
57	-0.0300 GY	0.00	6.00				
70	-0.0300 GY	0.00	6.00				
71	-0.0300 GY	0.00	6.00				
72	-0.0300 GY	0.00	6.00				
73	-0.0300 GY	0.00	6.00				
74	-0.0300 GY	0.00	6.00				
75	-0.0300 GY	0.00	6.00				
84	-0.0300 GY	0.00	6.00				
85	-0.0300 GY	0.00	6.00				
86	-0.0300 GY	0.00	6.00				
87	-0.0300 GY	0.00	6.00				
98	-0.0300 GY	0.00	6.00				
99	-0.0300 GY	0.00	6.00				
100	-0.0300 GY	0.00	6.00				
101	-0.0300 GY	0.00	6.00				
102	-0.0300 GY	0.00	6.00				
108	-0.0300 GY	0.00	6.00				
109	-0.0300 GY	0.00	6.00				
110	-0.0300 GY	0.00	6.00				
111	-0.0300 GY	0.00	6.00				
112	-0.0300 GY	0.00	6.00				
118	-0.0300 GY	0.00	6.00				
119	-0.0300 GY	0.00	6.00				
120	-0.0300 GY	0.00	6.00				
121	-0.0300 GY	0.00	6.00				
122	-0.0300 GY	0.00	6.00				
128	-0.0300 GY	0.00	6.00				
129	-0.0300 GY	0.00	6.00				
130	-0.0300 GY	0.00	6.00				
131	-0.0300 GY	0.00	6.00				
132	-0.0300 GY	0.00	6.00				
141	-0.0300 GY	0.00	6.00				
142	-0.0300 GY	0.00	6.00				

STAAD SPACE

-- PAGE NO. 12

145	-0.0300	GY	0.00	6.00
146	-0.0300	GY	0.00	6.00
149	-0.0300	GY	0.00	6.00
150	-0.0300	GY	0.00	6.00
217	-0.0300	GY	0.00	1.50
138	-0.0220	GY	0.00	6.00
218	-0.0220	GY	0.00	1.50
222	-0.0220	GY	0.00	1.50
58	-0.0110	GY	0.00	6.00
137	-0.0110	GY	0.00	4.50

LOADING 6 LOADTYPE LIVE TITLE EQUIPOS

JOINT LOAD - UNIT MTON METE

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
94	0.00	-0.75	0.00	0.00	0.00	0.00
95	0.00	-0.75	0.00	0.00	0.00	0.00

LOADING 7 LOADTYPE SEISMIC TITLE SISMO X

SELFWEIGHT X 1.000

ACTUAL WEIGHT OF THE STRUCTURE = 37.030 MTON

SELFWEIGHT Y 1.000

ACTUAL WEIGHT OF THE STRUCTURE = 37.030 MTON

SELFWEIGHT Z 1.000

ACTUAL WEIGHT OF THE STRUCTURE = 37.030 MTON

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	0.4690	GX	0.00	6.00			
44	0.4690	GX	0.00	6.00			
45	0.4690	GX	0.00	6.00			
47	0.4690	GX	0.00	6.00			
48	0.4690	GX	0.00	6.00			
49	0.4690	GX	0.00	6.00			
51	0.4690	GX	0.00	6.00			
52	0.4690	GX	0.00	6.00			
54	0.4690	GX	0.00	4.50			
59	0.4690	GX	0.00	6.00			
60	0.4690	GX	0.00	6.00			
61	0.4690	GX	0.00	6.00			

STAAD SPACE

-- PAGE NO. 13

46	0.9380	GX	0.00	6.00
50	0.9380	GX	0.00	6.00
53	0.9380	GX	0.00	6.00
55	0.9380	GX	0.00	6.00
56	0.9380	GX	0.00	6.00
57	0.9380	GX	0.00	6.00
70	0.9380	GX	0.00	6.00
71	0.9380	GX	0.00	6.00
72	0.9380	GX	0.00	6.00
73	0.9380	GX	0.00	6.00
74	0.9380	GX	0.00	6.00
75	0.9380	GX	0.00	6.00
84	0.9380	GX	0.00	6.00
85	0.9380	GX	0.00	6.00
86	0.9380	GX	0.00	6.00
87	0.9380	GX	0.00	6.00
98	0.9380	GX	0.00	6.00
99	0.9380	GX	0.00	6.00
100	0.9380	GX	0.00	6.00
101	0.9380	GX	0.00	6.00
102	0.9380	GX	0.00	6.00
108	0.9380	GX	0.00	6.00
109	0.9380	GX	0.00	6.00
110	0.9380	GX	0.00	6.00
111	0.9380	GX	0.00	6.00
112	0.9380	GX	0.00	6.00
118	0.9380	GX	0.00	6.00
119	0.9380	GX	0.00	6.00
120	0.9380	GX	0.00	6.00
121	0.9380	GX	0.00	6.00
122	0.9380	GX	0.00	6.00
128	0.9380	GX	0.00	6.00
129	0.9380	GX	0.00	6.00
130	0.9380	GX	0.00	6.00
131	0.9380	GX	0.00	6.00
132	0.9380	GX	0.00	6.00
141	0.9380	GX	0.00	6.00
142	0.9380	GX	0.00	6.00
145	0.9380	GX	0.00	6.00
146	0.9380	GX	0.00	6.00
149	0.9380	GX	0.00	6.00
150	0.9380	GX	0.00	6.00
217	0.9380	GX	0.00	1.50
138	0.7040	GX	0.00	6.00
218	0.7040	GX	0.00	1.50
222	0.7040	GX	0.00	1.50
58	0.3520	GX	0.00	6.00
137	0.3520	GX	0.00	4.50

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	0.4690	GY	0.00	6.00			
44	0.4690	GY	0.00	6.00			

STAAD SPACE

-- PAGE NO. 14

45	0.4690	GY	0.00	6.00
47	0.4690	GY	0.00	6.00
48	0.4690	GY	0.00	6.00
49	0.4690	GY	0.00	6.00
51	0.4690	GY	0.00	6.00
52	0.4690	GY	0.00	6.00
54	0.4690	GY	0.00	4.50
59	0.4690	GY	0.00	6.00
60	0.4690	GY	0.00	6.00
61	0.4690	GY	0.00	6.00
46	0.9380	GY	0.00	6.00
50	0.9380	GY	0.00	6.00
53	0.9380	GY	0.00	6.00
55	0.9380	GY	0.00	6.00
56	0.9380	GY	0.00	6.00
57	0.9380	GY	0.00	6.00
70	0.9380	GY	0.00	6.00
71	0.9380	GY	0.00	6.00
72	0.9380	GY	0.00	6.00
73	0.9380	GY	0.00	6.00
74	0.9380	GY	0.00	6.00
75	0.9380	GY	0.00	6.00
84	0.9380	GY	0.00	6.00
85	0.9380	GY	0.00	6.00
86	0.9380	GY	0.00	6.00
87	0.9380	GY	0.00	6.00
98	0.9380	GY	0.00	6.00
99	0.9380	GY	0.00	6.00
100	0.9380	GY	0.00	6.00
101	0.9380	GY	0.00	6.00
102	0.9380	GY	0.00	6.00
108	0.9380	GY	0.00	6.00
109	0.9380	GY	0.00	6.00
110	0.9380	GY	0.00	6.00
111	0.9380	GY	0.00	6.00
112	0.9380	GY	0.00	6.00
118	0.9380	GY	0.00	6.00
119	0.9380	GY	0.00	6.00
120	0.9380	GY	0.00	6.00
121	0.9380	GY	0.00	6.00
122	0.9380	GY	0.00	6.00
128	0.9380	GY	0.00	6.00
129	0.9380	GY	0.00	6.00
130	0.9380	GY	0.00	6.00
131	0.9380	GY	0.00	6.00
132	0.9380	GY	0.00	6.00
141	0.9380	GY	0.00	6.00
142	0.9380	GY	0.00	6.00
145	0.9380	GY	0.00	6.00
146	0.9380	GY	0.00	6.00
149	0.9380	GY	0.00	6.00
150	0.9380	GY	0.00	6.00
217	0.9380	GY	0.00	1.50
138	0.7040	GY	0.00	6.00
218	0.7040	GY	0.00	1.50
222	0.7040	GY	0.00	1.50

STAAD SPACE

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58	0.3520	GY	0.00	6.00
137	0.3520	GY	0.00	4.50

## MEMBER LOAD - UNIT MTON METE

MEMBER	UDL		L1	L2	CON	L	LIN1	LIN2
43	0.4690	GZ	0.00	6.00				
44	0.4690	GZ	0.00	6.00				
45	0.4690	GZ	0.00	6.00				
47	0.4690	GZ	0.00	6.00				
48	0.4690	GZ	0.00	6.00				
49	0.4690	GZ	0.00	6.00				
51	0.4690	GZ	0.00	6.00				
52	0.4690	GZ	0.00	6.00				
54	0.4690	GZ	0.00	4.50				
59	0.4690	GZ	0.00	6.00				
60	0.4690	GZ	0.00	6.00				
61	0.4690	GZ	0.00	6.00				
46	0.9380	GZ	0.00	6.00				
50	0.9380	GZ	0.00	6.00				
53	0.9380	GZ	0.00	6.00				
55	0.9380	GZ	0.00	6.00				
56	0.9380	GZ	0.00	6.00				
57	0.9380	GZ	0.00	6.00				
70	0.9380	GZ	0.00	6.00				
71	0.9380	GZ	0.00	6.00				
72	0.9380	GZ	0.00	6.00				
73	0.9380	GZ	0.00	6.00				
74	0.9380	GZ	0.00	6.00				
75	0.9380	GZ	0.00	6.00				
84	0.9380	GZ	0.00	6.00				
85	0.9380	GZ	0.00	6.00				
86	0.9380	GZ	0.00	6.00				
87	0.9380	GZ	0.00	6.00				
98	0.9380	GZ	0.00	6.00				
99	0.9380	GZ	0.00	6.00				
100	0.9380	GZ	0.00	6.00				
101	0.9380	GZ	0.00	6.00				
102	0.9380	GZ	0.00	6.00				
108	0.9380	GZ	0.00	6.00				
109	0.9380	GZ	0.00	6.00				
110	0.9380	GZ	0.00	6.00				
111	0.9380	GZ	0.00	6.00				
112	0.9380	GZ	0.00	6.00				
118	0.9380	GZ	0.00	6.00				
119	0.9380	GZ	0.00	6.00				
120	0.9380	GZ	0.00	6.00				
121	0.9380	GZ	0.00	6.00				
122	0.9380	GZ	0.00	6.00				
128	0.9380	GZ	0.00	6.00				
129	0.9380	GZ	0.00	6.00				
130	0.9380	GZ	0.00	6.00				
131	0.9380	GZ	0.00	6.00				
132	0.9380	GZ	0.00	6.00				

STAAD SPACE

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141	0.9380	GZ	0.00	6.00
142	0.9380	GZ	0.00	6.00
145	0.9380	GZ	0.00	6.00
146	0.9380	GZ	0.00	6.00
149	0.9380	GZ	0.00	6.00
150	0.9380	GZ	0.00	6.00
217	0.9380	GZ	0.00	1.50
138	0.7040	GZ	0.00	6.00
218	0.7040	GZ	0.00	1.50
222	0.7040	GZ	0.00	1.50
58	0.3520	GZ	0.00	6.00
137	0.3520	GZ	0.00	4.50

JOINT LOAD - UNIT MTON METE

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
94	0.75	0.00	0.00	0.00	0.00	0.00
95	0.75	0.00	0.00	0.00	0.00	0.00

JOINT LOAD - UNIT MTON METE

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
94	0.00	0.75	0.00	0.00	0.00	0.00
95	0.00	0.75	0.00	0.00	0.00	0.00

JOINT LOAD - UNIT MTON METE

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
94	0.00	0.00	0.75	0.00	0.00	0.00
95	0.00	0.00	0.75	0.00	0.00	0.00

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	0.0700	GX	0.00	6.00			
44	0.0700	GX	0.00	6.00			
45	0.0700	GX	0.00	6.00			
47	0.0700	GX	0.00	6.00			
48	0.0700	GX	0.00	6.00			
49	0.0700	GX	0.00	6.00			
51	0.0700	GX	0.00	6.00			
52	0.0700	GX	0.00	6.00			
54	0.0700	GX	0.00	4.50			
59	0.0700	GX	0.00	6.00			
60	0.0700	GX	0.00	6.00			
61	0.0700	GX	0.00	6.00			
46	0.1400	GX	0.00	6.00			
50	0.1400	GX	0.00	6.00			

STAAD SPACE

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53	0.1400	GX	0.00	6.00
55	0.1400	GX	0.00	6.00
56	0.1400	GX	0.00	6.00
57	0.1400	GX	0.00	6.00
70	0.1400	GX	0.00	6.00
71	0.1400	GX	0.00	6.00
72	0.1400	GX	0.00	6.00
73	0.1400	GX	0.00	6.00
74	0.1400	GX	0.00	6.00
75	0.1400	GX	0.00	6.00
84	0.1400	GX	0.00	6.00
85	0.1400	GX	0.00	6.00
86	0.1400	GX	0.00	6.00
87	0.1400	GX	0.00	6.00
98	0.1400	GX	0.00	6.00
99	0.1400	GX	0.00	6.00
100	0.1400	GX	0.00	6.00
101	0.1400	GX	0.00	6.00
102	0.1400	GX	0.00	6.00
108	0.1400	GX	0.00	6.00
109	0.1400	GX	0.00	6.00
110	0.1400	GX	0.00	6.00
111	0.1400	GX	0.00	6.00
112	0.1400	GX	0.00	6.00
118	0.1400	GX	0.00	6.00
119	0.1400	GX	0.00	6.00
120	0.1400	GX	0.00	6.00
121	0.1400	GX	0.00	6.00
122	0.1400	GX	0.00	6.00
128	0.1400	GX	0.00	6.00
129	0.1400	GX	0.00	6.00
130	0.1400	GX	0.00	6.00
131	0.1400	GX	0.00	6.00
132	0.1400	GX	0.00	6.00
141	0.1400	GX	0.00	6.00
142	0.1400	GX	0.00	6.00
145	0.1400	GX	0.00	6.00
146	0.1400	GX	0.00	6.00
149	0.1400	GX	0.00	6.00
150	0.1400	GX	0.00	6.00
217	0.1400	GX	0.00	1.50
138	0.1050	GX	0.00	6.00
218	0.1050	GX	0.00	1.50
222	0.1050	GX	0.00	1.50
58	0.0530	GX	0.00	6.00
137	0.0530	GX	0.00	4.50

MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	0.0700	GY	0.00	6.00			
44	0.0700	GY	0.00	6.00			
45	0.0700	GY	0.00	6.00			
47	0.0700	GY	0.00	6.00			

STAAD SPACE

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48	0.0700	GY	0.00	6.00
49	0.0700	GY	0.00	6.00
51	0.0700	GY	0.00	6.00
52	0.0700	GY	0.00	6.00
54	0.0700	GY	0.00	4.50
59	0.0700	GY	0.00	6.00
60	0.0700	GY	0.00	6.00
61	0.0700	GY	0.00	6.00
46	0.1400	GY	0.00	6.00
50	0.1400	GY	0.00	6.00
53	0.1400	GY	0.00	6.00
55	0.1400	GY	0.00	6.00
56	0.1400	GY	0.00	6.00
57	0.1400	GY	0.00	6.00
70	0.1400	GY	0.00	6.00
71	0.1400	GY	0.00	6.00
72	0.1400	GY	0.00	6.00
73	0.1400	GY	0.00	6.00
74	0.1400	GY	0.00	6.00
75	0.1400	GY	0.00	6.00
84	0.1400	GY	0.00	6.00
85	0.1400	GY	0.00	6.00
86	0.1400	GY	0.00	6.00
87	0.1400	GY	0.00	6.00
98	0.1400	GY	0.00	6.00
99	0.1400	GY	0.00	6.00
100	0.1400	GY	0.00	6.00
101	0.1400	GY	0.00	6.00
102	0.1400	GY	0.00	6.00
108	0.1400	GY	0.00	6.00
109	0.1400	GY	0.00	6.00
110	0.1400	GY	0.00	6.00
111	0.1400	GY	0.00	6.00
112	0.1400	GY	0.00	6.00
118	0.1400	GY	0.00	6.00
119	0.1400	GY	0.00	6.00
120	0.1400	GY	0.00	6.00
121	0.1400	GY	0.00	6.00
122	0.1400	GY	0.00	6.00
128	0.1400	GY	0.00	6.00
129	0.1400	GY	0.00	6.00
130	0.1400	GY	0.00	6.00
131	0.1400	GY	0.00	6.00
132	0.1400	GY	0.00	6.00
141	0.1400	GY	0.00	6.00
142	0.1400	GY	0.00	6.00
145	0.1400	GY	0.00	6.00
146	0.1400	GY	0.00	6.00
149	0.1400	GY	0.00	6.00
150	0.1400	GY	0.00	6.00
217	0.1400	GY	0.00	1.50
138	0.1050	GY	0.00	6.00
218	0.1050	GY	0.00	1.50
222	0.1050	GY	0.00	1.50
58	0.0530	GY	0.00	6.00
137	0.0530	GY	0.00	4.50



## MEMBER LOAD - UNIT MTON METE

MEMBER	UDL	L1	L2	CON	L	LIN1	LIN2
43	0.0700 GZ	0.00	6.00				
44	0.0700 GZ	0.00	6.00				
45	0.0700 GZ	0.00	6.00				
47	0.0700 GZ	0.00	6.00				
48	0.0700 GZ	0.00	6.00				
49	0.0700 GZ	0.00	6.00				
51	0.0700 GZ	0.00	6.00				
52	0.0700 GZ	0.00	6.00				
54	0.0700 GZ	0.00	4.50				
59	0.0700 GZ	0.00	6.00				
60	0.0700 GZ	0.00	6.00				
61	0.0700 GZ	0.00	6.00				
46	0.1400 GZ	0.00	6.00				
50	0.1400 GZ	0.00	6.00				
53	0.1400 GZ	0.00	6.00				
55	0.1400 GZ	0.00	6.00				
56	0.1400 GZ	0.00	6.00				
57	0.1400 GZ	0.00	6.00				
70	0.1400 GZ	0.00	6.00				
71	0.1400 GZ	0.00	6.00				
72	0.1400 GZ	0.00	6.00				
73	0.1400 GZ	0.00	6.00				
74	0.1400 GZ	0.00	6.00				
75	0.1400 GZ	0.00	6.00				
84	0.1400 GZ	0.00	6.00				
85	0.1400 GZ	0.00	6.00				
86	0.1400 GZ	0.00	6.00				
87	0.1400 GZ	0.00	6.00				
98	0.1400 GZ	0.00	6.00				
99	0.1400 GZ	0.00	6.00				
100	0.1400 GZ	0.00	6.00				
101	0.1400 GZ	0.00	6.00				
102	0.1400 GZ	0.00	6.00				
108	0.1400 GZ	0.00	6.00				
109	0.1400 GZ	0.00	6.00				
110	0.1400 GZ	0.00	6.00				
111	0.1400 GZ	0.00	6.00				
112	0.1400 GZ	0.00	6.00				
118	0.1400 GZ	0.00	6.00				
119	0.1400 GZ	0.00	6.00				
120	0.1400 GZ	0.00	6.00				
121	0.1400 GZ	0.00	6.00				
122	0.1400 GZ	0.00	6.00				
128	0.1400 GZ	0.00	6.00				
129	0.1400 GZ	0.00	6.00				
130	0.1400 GZ	0.00	6.00				
131	0.1400 GZ	0.00	6.00				
132	0.1400 GZ	0.00	6.00				
141	0.1400 GZ	0.00	6.00				
142	0.1400 GZ	0.00	6.00				

STAAD SPACE

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145	0.1400	GZ	0.00	6.00
146	0.1400	GZ	0.00	6.00
149	0.1400	GZ	0.00	6.00
150	0.1400	GZ	0.00	6.00
217	0.1400	GZ	0.00	1.50
138	0.1050	GZ	0.00	6.00
218	0.1050	GZ	0.00	1.50
222	0.1050	GZ	0.00	1.50
58	0.0530	GZ	0.00	6.00
137	0.0530	GZ	0.00	4.50

RESPONSE SPECTRUM VALUES - UNITS ( METE SECOND )

-----

DIRECTIONAL VALUES:

SCALE FACTOR = 9.81

X = 1.00 Y = 0.00 Z = 0.00

DAMPING FACTOR = 0.050

PERIOD VS. ACCELERATION

0.0010	0.0600
0.1000	0.0840
0.2000	0.1090
0.3000	0.1330
0.4000	0.1330
0.5000	0.1330
0.6000	0.1330
0.7000	0.1330
0.8000	0.1330
0.9000	0.1330
1.0000	0.1330
1.1000	0.1330
1.2000	0.1330
1.3000	0.1330
1.4000	0.1330
1.5000	0.1330
1.6000	0.1280
1.7000	0.1230
1.8000	0.1180
1.9000	0.1140
2.0000	0.1100
2.1000	0.1070
2.2000	0.1030
2.3000	0.1000
2.4000	0.0970
2.5000	0.0950
2.6000	0.0920
2.7000	0.0900
2.8000	0.0880
2.9000	0.0860
3.0000	0.0840
3.1000	0.0820
3.2000	0.0800
3.3000	0.0790

STAAD SPACE

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3.4000	0.0770
3.5000	0.0760
3.6000	0.0740
3.7000	0.0730
3.8000	0.0720
3.9000	0.0710
4.0000	0.0690
4.1000	0.0680
4.2000	0.0670
4.3000	0.0660
4.4000	0.0650
4.5000	0.0640
4.6000	0.0630
4.7000	0.0620
4.8000	0.0610
4.9000	0.0610
5.0000	0.0600

\*\*\*NOTE: MASSES DEFINED UNDER LOAD# 7 WILL FORM THE FINAL MASS MATRIX FOR DYNAMIC ANALYSIS.

LOADING 8 LOADTYPE SEISMIC TITLE SISMO Z

RESPONSE SPECTRUM VALUES - UNITS ( METE SECOND )

DIRECTIONAL VALUES: SCALE FACTOR = 9.81

X = 0.00 Y = 0.00 Z = 1.00 DAMPING FACTOR = 0.050

PERIOD VS. ACCELERATION

0.0010	0.0600
0.1000	0.0840
0.2000	0.1090
0.3000	0.1330
0.4000	0.1330
0.5000	0.1330
0.6000	0.1330
0.7000	0.1330
0.8000	0.1330
0.9000	0.1330
1.0000	0.1330
1.1000	0.1330
1.2000	0.1330
1.3000	0.1330
1.4000	0.1330
1.5000	0.1330
1.6000	0.1280
1.7000	0.1230
1.8000	0.1180

STAAD SPACE

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1.9000	0.1140
2.0000	0.1100
2.1000	0.1070
2.2000	0.1030
2.3000	0.1000
2.4000	0.0970
2.5000	0.0950
2.6000	0.0920
2.7000	0.0900
2.8000	0.0880
2.9000	0.0860
3.0000	0.0840
3.1000	0.0820
3.2000	0.0800
3.3000	0.0790
3.4000	0.0770
3.5000	0.0760
3.6000	0.0740
3.7000	0.0730
3.8000	0.0720
3.9000	0.0710
4.0000	0.0690
4.1000	0.0680
4.2000	0.0670
4.3000	0.0660
4.4000	0.0650
4.5000	0.0640
4.6000	0.0630
4.7000	0.0620
4.8000	0.0610
4.9000	0.0610
5.0000	0.0600

\*WARNING- ZERO STIFFNESS IN DIRECTION 6 AT JOINT 109 EQN.NO. 318  
 LOADS APPLIED OR DISTRIBUTED HERE FROM ELEMENTS WILL BE IGNORED.  
 THIS MAY BE DUE TO ALL MEMBERS AT THIS JOINT BEING RELEASED OR  
 EFFECTIVELY RELEASED IN THIS DIRECTION.

\*WARNING- ZERO STIFFNESS IN DIRECTION 2 AT JOINT 112 EQN.NO. 419  
 \*WARNING- ZERO STIFFNESS IN DIRECTION 4 AT JOINT 112 EQN.NO. 421  
 \*WARNING- ZERO STIFFNESS IN DIRECTION 6 AT JOINT 112 EQN.NO. 423

EIGEN METHOD : SUBSPACE

-----  
 NUMBER OF MODES REQUESTED = 20  
 NUMBER OF EXISTING MASSES IN THE MODEL = 200  
 NUMBER OF MODES THAT WILL BE USED = 20

## CALCULATED FREQUENCIES FOR LOAD CASE 7

MODE	FREQUENCY (CYCLES/SEC)	PERIOD (SEC)	ACCURACY
1	1.271	0.78700	0.000E+00
2	2.265	0.44158	0.000E+00
3	2.517	0.39737	0.000E+00
4	2.752	0.36340	1.902E-16
5	2.891	0.34596	5.170E-16
6	3.116	0.32087	2.965E-16
7	3.262	0.30655	1.353E-16
8	3.277	0.30518	2.682E-16
9	3.446	0.29018	3.637E-16
10	3.680	0.27174	2.126E-16
11	3.901	0.25634	1.892E-16
12	4.762	0.20997	1.016E-15
13	4.855	0.20596	1.222E-16
14	5.072	0.19715	2.480E-13
15	5.265	0.18993	7.732E-12
16	5.630	0.17761	5.110E-09
17	6.338	0.15778	6.194E-08
18	6.461	0.15478	5.313E-10
19	6.968	0.14352	1.644E-08
20	7.217	0.13856	1.389E-10

The following Frequencies are estimates that were calculated. These are for information only and will not be used. Remaining values are either above the cut off mode/freq values or are of low accuracy. To use these frequencies, rerun with a higher cutoff mode (or mode + freq) value.

CALCULATED FREQUENCIES FOR LOAD CASE 7

MODE	FREQUENCY(CYCLES/SEC)	PERIOD(SEC)	ACCURACY
21	7.532	0.13277	9.300E-11
22	7.618	0.13127	1.350E-07
23	7.658	0.13058	1.728E-09
24	7.692	0.13000	3.672E-09

RESPONSE LOAD CASE 7

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN MTON			GENERALIZED WEIGHT
	X	Y	Z	
1	1.964099E-07	1.288615E-06	1.676836E+02	7.387446E+01
2	8.823454E-03	1.431341E-06	1.031906E+02	5.350639E+01
3	4.506332E-02	4.891495E-05	4.134214E+01	5.445691E+01
4	8.472810E-03	2.053120E-06	2.252197E-01	1.656135E+01
5	1.850276E-03	1.279709E-06	1.104345E+00	1.321078E+01
6	3.781062E-02	5.725072E-05	9.046841E-02	8.792725E+01
7	3.523095E-03	4.539973E+00	4.757536E-06	1.342680E+01
8	2.372634E-02	4.345407E+01	1.003930E-05	1.275389E+01
9	9.372610E+00	5.604417E+01	1.106710E-03	3.526917E+01
10	3.384415E+02	2.136555E+00	5.239578E-02	2.125468E+02
11	1.314073E-01	4.981209E-04	5.167388E-05	4.604853E+01
12	1.997267E-01	4.289110E-04	2.007226E+01	1.151820E+02
13	8.151477E-02	4.808613E-02	2.464089E-03	4.280803E+01
14	1.270976E-02	7.647963E-07	1.678794E+00	4.419678E+01
15	3.954180E-02	1.034697E-05	2.285498E+00	1.015357E+02
16	6.240625E-04	1.133414E-07	2.531446E-02	1.391940E+01
17	1.060407E-02	1.371166E-05	2.136738E-02	4.280235E+01
18	1.013755E-03	1.099083E-05	2.973307E-01	1.216649E+01
19	1.933877E-01	5.151425E-04	1.076289E+01	1.309258E+01
20	2.417115E-02	2.568366E+01	2.057308E-03	2.538277E+01

SRSS MODAL COMBINATION METHOD USED.  
 DYNAMIC WEIGHT X Y Z 3.550681E+02 3.550681E+02 3.550681E+02 MTON  
 MISSING WEIGHT X Y Z -6.430036E+00 -2.231600E+02 -6.230140E+00 MTON  
 MODAL WEIGHT X Y Z 3.486381E+02 1.319081E+02 3.488380E+02 MTON

MODE	ACCELERATION-G	DAMPING
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1	0.13305	0.05000
2	0.13305	0.05000
3	0.13305	0.05000
4	0.13305	0.05000
5	0.13305	0.05000
6	0.13305	0.05000
7	0.13305	0.05000
8	0.13305	0.05000
9	0.13069	0.05000
10	0.12626	0.05000
11	0.12256	0.05000
12	0.11143	0.05000
13	0.11047	0.05000
14	0.10832	0.05000
15	0.10652	0.05000
16	0.10344	0.05000
17	0.09848	0.05000
18	0.09773	0.05000
19	0.09491	0.05000
20	0.09367	0.05000

MODAL BASE ACTIONS                      FORCES IN MTON LENGTH IN METE

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MOMENTS ARE ABOUT THE ORIGIN

MODE	PERIOD	FX	FY	FZ	MX	MY	MZ
1	0.787	0.00	-0.00	-0.00	-0.00	0.01	-0.00
2	0.442	0.00	-0.00	0.13	0.50	-1.02	-0.01
3	0.397	0.01	0.00	0.18	0.71	-6.06	-0.02
4	0.363	0.00	0.00	-0.01	-0.02	-0.31	-0.00
5	0.346	0.00	0.00	-0.01	-0.02	-0.02	-0.00
6	0.321	0.01	-0.00	0.01	0.04	0.30	-0.02
7	0.307	0.00	-0.02	-0.00	-0.37	0.01	-0.31
8	0.305	0.00	-0.14	-0.00	2.06	0.04	-2.43
9	0.290	1.22	-3.00	-0.01	35.95	14.61	-56.53
10	0.272	42.73	3.40	-0.53	-41.94	512.78	-89.87
11	0.256	0.02	0.00	-0.00	-0.57	0.20	-0.04
12	0.210	0.02	0.00	0.22	0.87	-4.17	-0.04
13	0.206	0.01	-0.01	0.00	0.09	0.08	-0.17
14	0.197	0.00	0.00	-0.02	-0.06	-0.04	-0.00
15	0.190	0.00	0.00	-0.03	-0.11	-0.24	0.00
16	0.178	0.00	0.00	-0.00	-0.00	-0.00	0.00
17	0.158	0.00	0.00	0.00	0.01	-0.02	0.00
18	0.155	0.00	0.00	0.00	0.01	-0.02	-0.00
19	0.144	0.02	0.00	0.14	0.53	-1.84	0.03
20	0.139	0.00	0.07	0.00	-0.68	0.01	0.22



MODE	MASS PARTICIPATION FACTORS IN PERCENT						BASE SHEAR IN MTON		
	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
1	0.00	0.00	47.23	0.000	0.000	47.226	0.00	0.00	0.00
2	0.00	0.00	29.06	0.002	0.000	76.288	0.00	0.00	0.00
3	0.01	0.00	11.64	0.015	0.000	87.931	0.01	0.00	0.00
4	0.00	0.00	0.06	0.018	0.000	87.995	0.00	0.00	0.00
5	0.00	0.00	0.31	0.018	0.000	88.306	0.00	0.00	0.00
6	0.01	0.00	0.03	0.029	0.000	88.331	0.01	0.00	0.00
7	0.00	1.28	0.00	0.030	1.279	88.331	0.00	0.00	0.00
8	0.01	12.24	0.00	0.036	13.517	88.331	0.00	0.00	0.00
9	2.64	15.78	0.00	2.676	29.301	88.332	1.22	0.00	0.00
10	95.32	0.60	0.01	97.993	29.903	88.346	42.73	0.00	0.00
11	0.04	0.00	0.00	98.030	29.903	88.346	0.02	0.00	0.00
12	0.06	0.00	5.65	98.087	29.903	93.999	0.02	0.00	0.00
13	0.02	0.01	0.00	98.110	29.916	94.000	0.01	0.00	0.00
14	0.00	0.00	0.47	98.113	29.916	94.473	0.00	0.00	0.00
15	0.01	0.00	0.64	98.124	29.916	95.117	0.00	0.00	0.00
16	0.00	0.00	0.01	98.124	29.916	95.124	0.00	0.00	0.00
17	0.00	0.00	0.01	98.127	29.916	95.130	0.00	0.00	0.00
18	0.00	0.00	0.08	98.128	29.916	95.214	0.00	0.00	0.00
19	0.05	0.00	3.03	98.182	29.917	98.245	0.02	0.00	0.00
20	0.01	7.23	0.00	98.189	37.150	98.245	0.00	0.00	0.00
				TOTAL SRSS	SHEAR		42.75	0.00	0.00
				TOTAL 10PCT	SHEAR		43.97	0.00	0.00
				TOTAL ABS	SHEAR		44.05	0.00	0.00

RESPONSE LOAD CASE 8

MODE	MODAL WEIGHT (MODAL MASS TIMES g) IN MTON			GENERALIZED WEIGHT
	X	Y	Z	
1	1.964099E-07	1.288615E-06	1.676836E+02	7.387446E+01
2	8.823454E-03	1.431341E-06	1.031906E+02	5.350639E+01
3	4.506332E-02	4.891495E-05	4.134214E+01	5.445691E+01
4	8.472810E-03	2.053120E-06	2.252197E-01	1.656135E+01
5	1.850276E-03	1.279709E-06	1.104345E+00	1.321078E+01
6	3.781062E-02	5.725072E-05	9.046841E-02	8.792725E+01
7	3.523095E-03	4.539973E+00	4.757536E-06	1.342680E+01
8	2.372634E-02	4.345407E+01	1.003930E-05	1.275389E+01

STAAD SPACE

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9	9.372610E+00	5.604417E+01	1.106710E-03	3.526917E+01
10	3.384415E+02	2.136555E+00	5.239578E-02	2.125468E+02
11	1.314073E-01	4.981209E-04	5.167388E-05	4.604853E+01
12	1.997267E-01	4.289110E-04	2.007226E+01	1.151820E+02
13	8.151477E-02	4.808613E-02	2.464089E-03	4.280803E+01
14	1.270976E-02	7.647963E-07	1.678794E+00	4.419678E+01
15	3.954180E-02	1.034697E-05	2.285498E+00	1.015357E+02
16	6.240625E-04	1.133414E-07	2.531446E-02	1.391940E+01
17	1.060407E-02	1.371166E-05	2.136738E-02	4.280235E+01
18	1.013755E-03	1.099083E-05	2.973307E-01	1.216649E+01
19	1.933877E-01	5.151425E-04	1.076289E+01	1.309258E+01
20	2.417115E-02	2.568366E+01	2.057308E-03	2.538277E+01

SRSS MODAL COMBINATION METHOD USED.  
 DYNAMIC WEIGHT X Y Z 3.550681E+02 3.550681E+02 3.550681E+02 MTON  
 MISSING WEIGHT X Y Z -6.430036E+00 -2.231600E+02 -6.230140E+00 MTON  
 MODAL WEIGHT X Y Z 3.486381E+02 1.319081E+02 3.488380E+02 MTON

MODE	ACCELERATION-G	DAMPING
----	-----	-----
1	0.13305	0.05000
2	0.13305	0.05000
3	0.13305	0.05000
4	0.13305	0.05000
5	0.13305	0.05000
6	0.13305	0.05000
7	0.13305	0.05000
8	0.13305	0.05000
9	0.13069	0.05000
10	0.12626	0.05000
11	0.12256	0.05000
12	0.11143	0.05000
13	0.11047	0.05000
14	0.10832	0.05000
15	0.10652	0.05000
16	0.10344	0.05000
17	0.09848	0.05000
18	0.09773	0.05000
19	0.09491	0.05000
20	0.09367	0.05000

MODAL BASE ACTIONS                      FORCES IN MTON LENGTH IN METE

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MODE	PERIOD	MOMENTS ARE ABOUT THE ORIGIN					
		FX	FY	FZ	MX	MY	MZ
1	0.787	-0.00	0.00	22.31	87.02	-397.22	0.05
2	0.442	0.13	-0.00	13.73	53.65	-109.98	-0.55
3	0.397	0.18	0.01	5.50	21.38	-183.65	-0.48
4	0.363	-0.01	-0.00	0.03	0.12	1.62	0.02
5	0.346	-0.01	-0.00	0.15	0.58	0.57	0.02
6	0.321	0.01	-0.00	0.01	0.06	0.46	-0.03
7	0.307	-0.00	0.00	0.00	0.01	-0.00	0.01
8	0.305	-0.00	0.00	0.00	-0.04	-0.00	0.05
9	0.290	-0.01	0.03	0.00	-0.39	-0.16	0.61
10	0.272	-0.53	-0.04	0.01	0.52	-6.38	1.12
11	0.256	-0.00	-0.00	0.00	0.01	-0.00	0.00
12	0.210	0.22	0.01	2.24	8.77	-41.77	-0.41
13	0.206	0.00	-0.00	0.00	0.02	0.01	-0.03
14	0.197	-0.02	-0.00	0.18	0.66	0.45	0.00
15	0.190	-0.03	-0.00	0.24	0.85	1.85	-0.01
16	0.178	-0.00	-0.00	0.00	0.01	0.02	-0.00
17	0.158	0.00	0.00	0.00	0.01	-0.02	0.00
18	0.155	0.00	0.00	0.03	0.11	-0.42	-0.00
19	0.144	0.14	0.01	1.02	3.93	-13.73	0.20
20	0.139	0.00	0.02	0.00	-0.20	0.00	0.06

MASS PARTICIPATION FACTORS IN PERCENT							BASE SHEAR IN MTON		
MODE	X	Y	Z	SUMM-X	SUMM-Y	SUMM-Z	X	Y	Z
1	0.00	0.00	47.23	0.000	0.000	47.226	0.00	0.00	22.31
2	0.00	0.00	29.06	0.002	0.000	76.288	0.00	0.00	13.73
3	0.01	0.00	11.64	0.015	0.000	87.931	0.00	0.00	5.50
4	0.00	0.00	0.06	0.018	0.000	87.995	0.00	0.00	0.03
5	0.00	0.00	0.31	0.018	0.000	88.306	0.00	0.00	0.15
6	0.01	0.00	0.03	0.029	0.000	88.331	0.00	0.00	0.01
7	0.00	1.28	0.00	0.030	1.279	88.331	0.00	0.00	0.00
8	0.01	12.24	0.00	0.036	13.517	88.331	0.00	0.00	0.00
9	2.64	15.78	0.00	2.676	29.301	88.332	0.00	0.00	0.00
10	95.32	0.60	0.01	97.993	29.903	88.346	0.00	0.00	0.01
11	0.04	0.00	0.00	98.030	29.903	88.346	0.00	0.00	0.00
12	0.06	0.00	5.65	98.087	29.903	93.999	0.00	0.00	2.24
13	0.02	0.01	0.00	98.110	29.916	94.000	0.00	0.00	0.00
14	0.00	0.00	0.47	98.113	29.916	94.473	0.00	0.00	0.18
15	0.01	0.00	0.64	98.124	29.916	95.117	0.00	0.00	0.24
16	0.00	0.00	0.01	98.124	29.916	95.124	0.00	0.00	0.00
17	0.00	0.00	0.01	98.127	29.916	95.130	0.00	0.00	0.00
18	0.00	0.00	0.08	98.128	29.916	95.214	0.00	0.00	0.03
19	0.05	0.00	3.03	98.182	29.917	98.245	0.00	0.00	1.02
20	0.01	7.23	0.00	98.189	37.150	98.245	0.00	0.00	0.00
-----							-----		
TOTAL SRSS SHEAR							0.00	0.00	26.88
TOTAL 10PCT SHEAR							0.00	0.00	26.91
TOTAL ABS SHEAR							0.00	0.00	45.45

FOR LOADING - 1

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
1	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
2	0.00000E+00	-4.45720E-01	0.00000E+00	1.38424E-01	0.00000E+00	-1.53804E-02
3	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
4	0.00000E+00	-4.91861E-01	0.00000E+00	1.38424E-01	0.00000E+00	0.00000E+00
5	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
6	0.00000E+00	-4.99290E-01	0.00000E+00	1.38424E-01	0.00000E+00	-2.47636E-03
7	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
8	0.00000E+00	-4.87755E-01	0.00000E+00	7.78633E-02	0.00000E+00	-1.67492E-02
9	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
10	0.00000E+00	-4.34185E-01	0.00000E+00	1.38424E-01	0.00000E+00	8.65150E-03
11	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
12	0.00000E+00	-5.84144E-01	0.00000E+00	0.00000E+00	0.00000E+00	-1.53804E-02
13	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
14	0.00000E+00	-6.30285E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
15	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
16	0.00000E+00	-6.85220E-01	0.00000E+00	0.00000E+00	0.00000E+00	-1.83116E-02
17	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
18	0.00000E+00	-5.69867E-01	0.00000E+00	1.29772E-01	0.00000E+00	2.50406E-02
19	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
20	0.00000E+00	-5.72609E-01	0.00000E+00	0.00000E+00	0.00000E+00	8.65150E-03
21	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
22	0.00000E+00	-5.84144E-01	0.00000E+00	2.19750E-08	0.00000E+00	-1.53804E-02
23	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
24	0.00000E+00	-5.84144E-01	0.00000E+00	2.19750E-08	0.00000E+00	1.53804E-02
25	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
26	0.00000E+00	-6.39079E-01	0.00000E+00	2.19750E-08	0.00000E+00	-3.36920E-02
27	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
28	0.00000E+00	-6.92649E-01	0.00000E+00	2.19750E-08	0.00000E+00	1.58353E-02
29	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
30	0.00000E+00	-5.91573E-01	0.00000E+00	2.19750E-08	0.00000E+00	1.78568E-02
31	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
32	0.00000E+00	-4.53149E-01	0.00000E+00	-1.38424E-01	0.00000E+00	-1.78568E-02
33	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
34	0.00000E+00	-6.60001E-01	0.00000E+00	2.22872E-02	0.00000E+00	2.47636E-03
35	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
36	0.00000E+00	-6.85220E-01	0.00000E+00	-4.39501E-08	0.00000E+00	-1.83116E-02
37	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
38	0.00000E+00	-7.14936E-01	0.00000E+00	2.22872E-02	0.00000E+00	1.58353E-02
39	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
40	0.00000E+00	-5.91573E-01	0.00000E+00	-4.39501E-08	0.00000E+00	1.78568E-02
41	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
42	0.00000E+00	-4.75436E-01	0.00000E+00	-1.60711E-01	0.00000E+00	-1.78568E-02
43	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
44	0.00000E+00	-5.06720E-01	0.00000E+00	-1.38424E-01	0.00000E+00	0.00000E+00
45	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
46	0.00000E+00	-5.29007E-01	0.00000E+00	-1.60711E-01	0.00000E+00	0.00000E+00
47	0.00000E+00	-2.61155E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
48	0.00000E+00	-4.53149E-01	0.00000E+00	-1.38424E-01	0.00000E+00	1.78568E-02
49	0.00000E+00	-2.26461E-01	0.00000E+00	1.34178E-01	0.00000E+00	0.00000E+00
50	0.00000E+00	-2.26461E-01	0.00000E+00	1.34178E-01	0.00000E+00	0.00000E+00
51	0.00000E+00	-3.60639E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
52	0.00000E+00	-3.60639E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
53	0.00000E+00	-3.60639E-01	0.00000E+00	2.19750E-08	0.00000E+00	0.00000E+00
54	0.00000E+00	-3.60639E-01	0.00000E+00	2.19750E-08	0.00000E+00	0.00000E+00
55	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	0.00000E+00
56	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	0.00000E+00
57	0.00000E+00	-2.26461E-01	0.00000E+00	1.34178E-01	0.00000E+00	-5.49376E-09
58	0.00000E+00	-2.26461E-01	0.00000E+00	1.34178E-01	0.00000E+00	1.09875E-08
59	0.00000E+00	-2.26461E-01	0.00000E+00	-1.34178E-01	0.00000E+00	-5.49376E-09
60	0.00000E+00	-2.26461E-01	0.00000E+00	-1.34178E-01	0.00000E+00	1.09875E-08
61	0.00000E+00	-2.26461E-01	0.00000E+00	1.34178E-01	0.00000E+00	-5.49376E-09
62	0.00000E+00	-2.26461E-01	0.00000E+00	1.34178E-01	0.00000E+00	1.09875E-08
63	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	-6.86720E-09
64	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	1.23610E-08
65	0.00000E+00	-2.41319E-01	0.00000E+00	1.34178E-01	0.00000E+00	-1.23610E-08
66	0.00000E+00	-2.41319E-01	0.00000E+00	1.34178E-01	0.00000E+00	0.00000E+00
67	0.00000E+00	-2.41319E-01	0.00000E+00	1.34178E-01	0.00000E+00	0.00000E+00
68	0.00000E+00	-2.41319E-01	0.00000E+00	1.34178E-01	0.00000E+00	2.74688E-08

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
69	0.00000E+00	-2.41319E-01	0.00000E+00	1.34178E-01	0.00000E+00	-2.74688E-08
70	0.00000E+00	-4.70509E-01	0.00000E+00	0.00000E+00	0.00000E+00	-2.47219E-08
71	0.00000E+00	-4.70509E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
72	0.00000E+00	-4.70509E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
73	0.00000E+00	-4.70509E-01	0.00000E+00	0.00000E+00	0.00000E+00	5.21907E-08
74	0.00000E+00	-4.70509E-01	0.00000E+00	0.00000E+00	0.00000E+00	-5.21907E-08
75	0.00000E+00	-4.70509E-01	0.00000E+00	2.19750E-08	0.00000E+00	-2.47219E-08
76	0.00000E+00	-4.70509E-01	0.00000E+00	2.19750E-08	0.00000E+00	0.00000E+00
77	0.00000E+00	-4.70509E-01	0.00000E+00	2.19750E-08	0.00000E+00	0.00000E+00
78	0.00000E+00	-4.70509E-01	0.00000E+00	2.19750E-08	0.00000E+00	5.21907E-08
79	0.00000E+00	-4.70509E-01	0.00000E+00	2.19750E-08	0.00000E+00	-5.21907E-08
80	0.00000E+00	-4.70509E-01	0.00000E+00	-4.39501E-08	0.00000E+00	-2.47219E-08
81	0.00000E+00	-4.70509E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
82	0.00000E+00	-4.70509E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
83	0.00000E+00	-4.70509E-01	0.00000E+00	-4.39501E-08	0.00000E+00	5.21907E-08
84	0.00000E+00	-4.70509E-01	0.00000E+00	-4.39501E-08	0.00000E+00	-5.21907E-08
85	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	-1.23610E-08
86	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	0.00000E+00
87	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	0.00000E+00
88	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	2.74688E-08
89	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	-2.74688E-08
90	0.00000E+00	-2.04452E-01	0.00000E+00	7.54754E-02	0.00000E+00	2.59545E-02
91	0.00000E+00	-2.03390E-01	0.00000E+00	1.34178E-01	0.00000E+00	-3.57094E-08
92	0.00000E+00	-1.68784E-01	0.00000E+00	1.34178E-01	0.00000E+00	-2.88383E-03
93	0.00000E+00	-1.68784E-01	0.00000E+00	1.34178E-01	0.00000E+00	2.88381E-03
94	0.00000E+00	-3.75498E-01	0.00000E+00	2.19750E-08	0.00000E+00	2.74688E-08
95	0.00000E+00	-3.75498E-01	0.00000E+00	2.19750E-08	0.00000E+00	-5.49376E-08
96	0.00000E+00	-3.75498E-01	0.00000E+00	-4.39501E-08	0.00000E+00	2.74688E-08
97	0.00000E+00	-3.75498E-01	0.00000E+00	-4.39501E-08	0.00000E+00	-5.49376E-08
98	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	2.74688E-08
99	0.00000E+00	-2.41319E-01	0.00000E+00	-1.34178E-01	0.00000E+00	-5.49376E-08
105	0.00000E+00	-1.80320E-01	0.00000E+00	-1.34178E-01	0.00000E+00	-7.69022E-03
107	0.00000E+00	-7.96858E-02	0.00000E+00	-8.38615E-03	0.00000E+00	2.40352E-08
108	0.00000E+00	-1.64829E-01	0.00000E+00	-6.92118E-02	0.00000E+00	0.00000E+00
109	0.00000E+00	-1.60584E-01	0.00000E+00	-6.70892E-02	0.00000E+00	0.00000E+00
110	0.00000E+00	-1.14912E-01	0.00000E+00	8.38615E-03	0.00000E+00	-2.54086E-08
111	0.00000E+00	-7.96858E-02	0.00000E+00	-8.38615E-03	0.00000E+00	7.69020E-03

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 1  
LOADTYPE DEAD TITLE PP

CENTER OF FORCE BASED ON Y FORCES ONLY (METER).  
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.158561003E+02  
Y = 0.323988019E+01  
Z = 0.115688853E+02

\*\*\*TOTAL APPLIED LOAD ( MTON METER ) SUMMARY (LOADING 1 )  
SUMMATION FORCE-X = 0.00  
SUMMATION FORCE-Y = -37.03  
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= 428.39 MY= 0.00 MZ= -587.15

\*\*\*TOTAL REACTION LOAD( MTON METE ) SUMMARY (LOADING 1 )  
 SUMMATION FORCE-X = 0.00  
 SUMMATION FORCE-Y = 37.03  
 SUMMATION FORCE-Z = -0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= -428.39 MY= -0.00 MZ= 587.15

MAXIMUM DISPLACEMENTS ( CM /RADIANS) (LOADING 1)  
 MAXIMUMS AT NODE  
 X = 9.59236E-04 42  
 Y = -1.85355E-01 67  
 Z = -2.18051E-04 48  
 RX= -2.20374E-04 107  
 RY= 3.57187E-07 61  
 RZ= -4.27909E-04 65

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY ( MTON METE )-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00 -0.08	-0.26 -0.62	0.00 -0.03	0.00 -0.04	0.00 0.00	0.00 0.09	111111
3	0.00 0.02	-0.26 -0.88	0.00 -0.03	0.00 -0.04	0.00 0.00	0.00 -0.03	111111
5	0.00 -0.26	-0.26 -1.29	0.00 -0.03	0.00 -0.04	0.00 0.00	0.00 0.29	111111
6	0.00 0.26	-0.50 0.50	0.00 0.03	0.14 -0.14	0.00 -0.00	-0.00 0.00	000000
7	0.00 0.26	-0.26 -1.29	0.00 -0.04	0.00 -0.05	0.00 0.00	0.00 -0.31	111111
8	0.00 -0.26	-0.49 0.49	0.00 0.04	0.08 -0.08	0.00 -0.00	-0.02 0.02	000000
9	0.00 0.08	-0.26 -0.66	0.00 -0.03	0.00 -0.04	0.00 0.00	0.00 -0.10	111111
11	0.00 -0.16	-0.26 -0.97	0.00 0.01	0.00 0.01	0.00 0.00	0.00 0.18	111111
12	0.00 0.16	-0.58 0.58	0.00 -0.01	0.00 -0.00	0.00 -0.00	-0.02 0.02	000000
13	0.00 0.12	-0.26 -1.17	0.00 0.00	0.00 0.01	0.00 0.00	0.00 -0.14	111111
14	0.00 -0.12	-0.63 0.63	0.00 -0.00	0.00 -0.00	0.00 -0.00	0.00 -0.00	000000
15	0.00 -0.62	-0.26 -2.27	0.00 0.00	0.00 0.01	0.00 0.00	0.00 0.72	111111

STAAD SPACE						-- PAGE NO. 34	
17	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.59	-2.50	0.02	0.02	0.00	-0.69	111111
18	0.00	-0.57	0.00	0.13	0.00	0.03	
	-0.59	0.57	-0.02	-0.13	-0.00	-0.03	000000
19	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.10	-0.89	0.00	0.00	0.00	-0.13	111111
20	0.00	-0.57	0.00	0.00	0.00	0.01	
	-0.10	0.57	-0.00	-0.00	-0.00	-0.01	000000
21	0.00	-0.26	0.00	0.00	0.00	0.00	
	-0.17	-0.98	-0.00	-0.00	0.00	0.19	111111
22	0.00	-0.58	0.00	0.00	0.00	-0.02	
	0.17	0.58	0.00	-0.00	-0.00	0.02	000000
23	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.17	-0.96	0.00	0.00	0.00	-0.21	111111
24	0.00	-0.58	0.00	0.00	0.00	0.02	
	-0.17	0.58	-0.00	-0.00	-0.00	-0.02	000000
25	0.00	-0.26	0.00	0.00	0.00	0.00	
	-0.73	-1.74	0.00	0.00	0.00	0.84	111111
26	0.00	-0.64	0.00	0.00	0.00	-0.03	
	0.73	0.64	-0.00	-0.00	-0.00	0.03	000000
27	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.53	-2.41	-0.00	-0.00	0.00	-0.62	111111
28	0.00	-0.69	0.00	0.00	0.00	0.02	
	-0.53	0.69	0.00	-0.00	-0.00	-0.02	000000
29	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.10	-0.86	-0.00	-0.00	0.00	-0.12	111111
31	0.00	-0.26	0.00	0.00	0.00	0.00	
	-0.09	-0.65	0.03	0.04	0.00	0.09	111111
33	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.06	-1.03	-0.01	-0.01	0.00	-0.08	111111
35	0.00	-0.26	0.00	0.00	0.00	0.00	
	-0.61	-2.27	-0.00	-0.01	0.00	0.71	111111
36	0.00	-0.69	0.00	-0.00	0.00	-0.02	
	0.61	0.69	0.00	0.00	-0.00	0.02	000000
37	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.56	-2.54	-0.01	-0.01	0.00	-0.66	111111
38	0.00	-0.71	0.00	0.02	0.00	0.02	
	-0.56	0.71	0.01	-0.02	-0.00	-0.02	000000
39	0.00	-0.26	0.00	0.00	0.00	0.00	
	0.10	-0.87	-0.01	-0.01	0.00	-0.12	111111
41	0.00	-0.26	0.00	0.00	0.00	0.00	
	-0.06	-0.64	0.04	0.05	-0.00	0.06	111111
43	0.00	-0.26	0.00	0.00	0.00	0.00	
	-0.23	-1.34	0.03	0.04	0.00	0.26	111111
44	0.00	-0.51	0.00	-0.14	0.00	0.00	



APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
2	0.00000E+00	-1.40700E+00	0.00000E+00	1.40700E+00	0.00000E+00	0.00000E+00
4	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
6	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
8	0.00000E+00	-1.05525E+00	0.00000E+00	7.91437E-01	0.00000E+00	0.00000E+00
10	0.00000E+00	-1.05600E+00	0.00000E+00	1.05600E+00	0.00000E+00	0.00000E+00
12	0.00000E+00	-2.81400E+00	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
14	0.00000E+00	-4.22100E+00	0.00000E+00	-1.40700E+00	0.00000E+00	0.00000E+00
16	0.00000E+00	-4.22100E+00	0.00000E+00	-1.40700E+00	0.00000E+00	0.00000E+00
18	0.00000E+00	-3.51750E+00	0.00000E+00	2.63812E+00	0.00000E+00	0.00000E+00
20	0.00000E+00	-2.46300E+00	0.00000E+00	3.51000E-01	0.00000E+00	0.00000E+00
22	0.00000E+00	-2.81400E+00	0.00000E+00	2.63700E-07	0.00000E+00	0.00000E+00
24	0.00000E+00	-2.81400E+00	0.00000E+00	2.63700E-07	0.00000E+00	0.00000E+00
26	0.00000E+00	-2.81400E+00	0.00000E+00	2.63700E-07	0.00000E+00	0.00000E+00
28	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
30	0.00000E+00	-2.81400E+00	0.00000E+00	2.63700E-07	0.00000E+00	0.00000E+00
32	0.00000E+00	-1.40700E+00	0.00000E+00	-1.40700E+00	0.00000E+00	0.00000E+00
34	0.00000E+00	-2.81400E+00	0.00000E+00	-1.75800E-07	0.00000E+00	0.00000E+00
36	0.00000E+00	-4.22100E+00	0.00000E+00	1.40700E+00	0.00000E+00	0.00000E+00
38	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
40	0.00000E+00	-2.81400E+00	0.00000E+00	-1.75800E-07	0.00000E+00	0.00000E+00
42	0.00000E+00	-1.40700E+00	0.00000E+00	-1.40700E+00	0.00000E+00	0.00000E+00
44	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
46	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
48	0.00000E+00	-1.40700E+00	0.00000E+00	-1.40700E+00	0.00000E+00	0.00000E+00
49	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
50	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
51	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
52	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
53	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
54	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
55	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
56	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
57	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
58	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
59	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
60	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
61	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
62	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
63	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
64	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
65	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
66	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
67	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
68	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
69	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
70	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
71	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
72	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
73	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
74	0.00000E+00	-5.62800E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
75	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
76	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
77	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
78	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
79	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
80	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
81	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
82	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
83	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
84	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
85	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
86	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
87	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
88	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
89	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
90	0.00000E+00	-7.92000E-01	0.00000E+00	5.94000E-01	0.00000E+00	0.00000E+00
91	0.00000E+00	-2.11200E+00	0.00000E+00	2.11200E+00	0.00000E+00	0.00000E+00
92	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
93	0.00000E+00	-2.81400E+00	0.00000E+00	2.81400E+00	0.00000E+00	0.00000E+00
94	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
95	0.00000E+00	-5.62800E+00	0.00000E+00	5.27401E-07	0.00000E+00	0.00000E+00
96	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
97	0.00000E+00	-5.62800E+00	0.00000E+00	-3.51601E-07	0.00000E+00	0.00000E+00
98	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
99	0.00000E+00	-2.81400E+00	0.00000E+00	-2.81400E+00	0.00000E+00	0.00000E+00
105	0.00000E+00	-2.11200E+00	0.00000E+00	-2.11200E+00	0.00000E+00	0.00000E+00
107	0.00000E+00	-5.28000E-01	0.00000E+00	-1.32000E-01	0.00000E+00	0.00000E+00
108	0.00000E+00	-1.75875E+00	0.00000E+00	-6.15562E-01	0.00000E+00	0.00000E+00
109	0.00000E+00	-1.32000E+00	0.00000E+00	-4.62000E-01	0.00000E+00	0.00000E+00
110	0.00000E+00	-5.28000E-01	0.00000E+00	1.32000E-01	0.00000E+00	0.00000E+00
111	0.00000E+00	-5.28000E-01	0.00000E+00	-1.32000E-01	0.00000E+00	0.00000E+00

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 2  
LOADTYPE DEAD TITLE CM

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).  
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.162119485E+02  
Y = 0.389999989E+01  
Z = 0.116743350E+02

\*\*\*TOTAL APPLIED LOAD ( MTON METE ) SUMMARY (LOADING 2 )  
SUMMATION FORCE-X = 0.00  
SUMMATION FORCE-Y = -280.88  
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
MX= 3279.08 MY= 0.00 MZ= -4553.60

\*\*\*TOTAL REACTION LOAD( MTON METE ) SUMMARY (LOADING 2 )  
SUMMATION FORCE-X = 0.00  
SUMMATION FORCE-Y = 280.88  
SUMMATION FORCE-Z = -0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= -3279.08 MY= -0.00 MZ= 4553.60

MAXIMUM DISPLACEMENTS ( CM /RADIANS) (LOADING 2)  
 MAXIMUMS AT NODE  
 X = 1.03404E-02 42  
 Y = -2.23406E+00 72  
 Z = 2.77982E-03 2  
 RX= -3.62400E-03 60  
 RY= 4.09581E-06 61  
 RZ= -4.98421E-03 70

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY ( MTON METE )-

JT	EXT FX/ INT FX	EXT FY/ INT FY	EXT FZ/ INT FZ	EXT MX/ INT MX	EXT MY/ INT MY	EXT MZ/ INT MZ	
							SUPPORT=1
1	0.00 -0.87	0.00 -3.43	0.00 -0.33	0.00 -0.41	0.00 0.00	0.00 0.98	111111
2	0.00 0.87	-1.41 1.41	0.00 0.33	1.41 -1.41	0.00 -0.00	0.00 0.00	000000
3	0.00 0.15	0.00 -7.44	0.00 -0.71	0.00 -0.90	0.00 0.00	0.00 -0.21	111111
4	0.00 -0.15	-2.81 2.81	0.00 0.71	2.81 -2.81	0.00 -0.00	0.00 -0.00	000000
5	0.00 -2.62	0.00 -11.69	0.00 -0.72	0.00 -0.92	0.00 0.00	0.00 3.00	111111
6	0.00 2.62	-2.81 2.81	0.00 0.72	2.81 -2.81	0.00 -0.00	0.00 -0.00	000000
7	0.00 3.17	0.00 -8.61	0.00 -0.37	0.00 -0.47	0.00 0.00	0.00 -3.71	111111
8	0.00 -3.17	-1.06 1.06	0.00 0.37	0.79 -0.79	0.00 -0.00	0.00 0.00	000000
9	0.00 0.47	0.00 -2.67	0.00 -0.25	0.00 -0.33	0.00 0.00	0.00 -0.58	111111
10	0.00 -0.47	-1.06 1.06	0.00 0.25	1.06 -1.06	0.00 -0.00	0.00 -0.00	000000
11	0.00 -2.53	0.00 -8.97	0.00 0.06	0.00 0.09	0.00 0.00	0.00 2.89	111111
12	0.00 2.53	-2.81 2.81	0.00 -0.06	0.00 -0.00	0.00 -0.00	0.00 0.00	000000
13	0.00 1.95	0.00 -12.55	0.00 0.34	0.00 0.44	0.00 0.00	0.00 -2.31	111111
14	0.00 -1.95	-4.22 4.22	0.00 -0.34	-1.41 1.41	0.00 -0.00	0.00 -0.00	000000
15	0.00 -7.68	0.00 -23.79	0.00 0.33	0.00 0.42	0.00 0.00	0.00 8.87	111111

STAAD SPACE						-- PAGE NO. 38	
19	0.00	0.00	0.00	0.00	0.00	0.00	
	1.10	-6.08	-0.04	-0.07	0.00	-1.33	111111
20	0.00	-2.46	0.00	0.35	0.00	0.00	
	-1.10	2.46	0.04	-0.35	-0.00	0.00	000000
21	0.00	0.00	0.00	0.00	0.00	0.00	
	-2.58	-9.05	-0.04	-0.03	0.00	2.93	111111
22	0.00	-2.81	0.00	0.00	0.00	0.00	
	2.58	2.81	0.04	-0.00	-0.00	0.00	000000
23	0.00	0.00	0.00	0.00	0.00	0.00	
	2.65	-8.80	-0.03	-0.03	0.00	-3.14	111111
24	0.00	-2.81	0.00	0.00	0.00	0.00	
	-2.65	2.81	0.03	-0.00	-0.00	0.00	000000
25	0.00	0.00	0.00	0.00	0.00	0.00	
	-8.61	-15.82	0.00	0.01	0.00	9.93	111111
26	0.00	-2.81	0.00	0.00	0.00	0.00	
	8.61	2.81	-0.00	-0.00	-0.00	0.00	000000
27	0.00	0.00	0.00	0.00	0.00	0.00	
	5.90	-27.76	0.02	0.01	0.00	-6.91	111111
28	0.00	-5.63	0.00	0.00	0.00	0.00	
	-5.90	5.63	-0.02	-0.00	-0.00	0.00	000000
29	0.00	0.00	0.00	0.00	0.00	0.00	
	1.66	-7.40	-0.00	-0.02	0.00	-1.98	111111
30	0.00	-2.81	0.00	0.00	0.00	0.00	
	-1.66	2.81	0.00	-0.00	-0.00	-0.00	000000
31	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.87	-3.50	0.35	0.46	0.00	0.93	111111
32	0.00	-1.41	0.00	-1.41	0.00	0.00	
	0.87	1.41	-0.35	1.41	-0.00	-0.00	000000
33	0.00	0.00	0.00	0.00	0.00	0.00	
	0.58	-6.93	-0.03	-0.03	0.00	-0.75	111111
34	0.00	-2.81	0.00	-0.00	0.00	0.00	
	-0.58	2.81	-0.28	0.00	0.00	0.00	000000
35	0.00	0.00	0.00	0.00	0.00	0.00	
	-7.47	-23.92	-0.32	-0.41	0.00	8.59	111111
36	0.00	-4.22	0.00	1.41	0.00	0.00	
	7.47	4.22	0.32	-1.41	-0.00	0.00	000000
37	0.00	0.00	0.00	0.00	0.00	0.00	
	6.48	-29.47	-0.09	-0.13	0.00	-7.59	111111
38	0.00	-5.63	0.00	-0.00	0.00	0.00	
	-6.48	5.63	0.09	0.00	-0.00	-0.00	000000
39	0.00	0.00	0.00	0.00	0.00	0.00	
	1.60	-7.44	-0.06	-0.08	0.00	-1.93	111111
40	0.00	-2.81	0.00	-0.00	0.00	0.00	
	-1.60	2.81	0.06	0.00	-0.00	0.00	000000
41	0.00	0.00	0.00	0.00	0.00	0.00	

STAAD SPACE

-- PAGE NO. 39

48 0.00 -1.41 0.00 -1.41 0.00 0.00  
 -0.60 1.41 -0.33 1.41 -0.00 -0.00 000000

FOR LOADING - 3

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
2	0.00000E+00	-3.00000E-01	0.00000E+00	3.00000E-01	0.00000E+00	0.00000E+00
4	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
6	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
8	0.00000E+00	-2.25000E-01	0.00000E+00	1.68750E-01	0.00000E+00	0.00000E+00
10	0.00000E+00	-2.25000E-01	0.00000E+00	2.25000E-01	0.00000E+00	0.00000E+00
12	0.00000E+00	-6.00000E-01	0.00000E+00	2.19750E-08	0.00000E+00	0.00000E+00
14	0.00000E+00	-9.00000E-01	0.00000E+00	-3.00000E-01	0.00000E+00	0.00000E+00
16	0.00000E+00	-9.00000E-01	0.00000E+00	-3.00000E-01	0.00000E+00	0.00000E+00
18	0.00000E+00	-7.50000E-01	0.00000E+00	5.62500E-01	0.00000E+00	0.00000E+00
20	0.00000E+00	-5.25000E-01	0.00000E+00	7.50000E-02	0.00000E+00	0.00000E+00
22	0.00000E+00	-6.00000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
24	0.00000E+00	-6.00000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
26	0.00000E+00	-6.00000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
28	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
30	0.00000E+00	-6.00000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
32	0.00000E+00	-3.00000E-01	0.00000E+00	-3.00000E-01	0.00000E+00	0.00000E+00
34	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
36	0.00000E+00	-9.00000E-01	0.00000E+00	3.00000E-01	0.00000E+00	0.00000E+00
38	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
40	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
42	0.00000E+00	-3.00000E-01	0.00000E+00	-3.00000E-01	0.00000E+00	0.00000E+00
44	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
46	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
48	0.00000E+00	-3.00000E-01	0.00000E+00	-3.00000E-01	0.00000E+00	0.00000E+00
49	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
50	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
51	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
52	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
53	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
54	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
55	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
56	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
57	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
58	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
59	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
60	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
61	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
62	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
63	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
64	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
65	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
66	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
67	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
68	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
69	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
70	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
71	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
72	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
73	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
74	0.00000E+00	-1.20000E+00	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
75	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
76	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
77	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
78	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
79	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
80	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
81	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
82	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
83	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
84	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
85	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
86	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
87	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
88	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
89	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
90	0.00000E+00	-1.68750E-01	0.00000E+00	1.26563E-01	0.00000E+00	0.00000E+00
91	0.00000E+00	-4.50000E-01	0.00000E+00	4.50000E-01	0.00000E+00	0.00000E+00
92	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
93	0.00000E+00	-6.00000E-01	0.00000E+00	6.00000E-01	0.00000E+00	0.00000E+00
94	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
95	0.00000E+00	-1.20000E+00	0.00000E+00	1.75800E-07	0.00000E+00	0.00000E+00
96	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
97	0.00000E+00	-1.20000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
98	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
99	0.00000E+00	-6.00000E-01	0.00000E+00	-6.00000E-01	0.00000E+00	0.00000E+00
105	0.00000E+00	-4.50000E-01	0.00000E+00	-4.50000E-01	0.00000E+00	0.00000E+00
107	0.00000E+00	-1.12500E-01	0.00000E+00	-2.81250E-02	0.00000E+00	0.00000E+00
108	0.00000E+00	-3.75000E-01	0.00000E+00	-1.31250E-01	0.00000E+00	0.00000E+00
109	0.00000E+00	-2.81250E-01	0.00000E+00	-9.84375E-02	0.00000E+00	0.00000E+00
110	0.00000E+00	-1.12500E-01	0.00000E+00	2.81250E-02	0.00000E+00	0.00000E+00
111	0.00000E+00	-1.12500E-01	0.00000E+00	-2.81250E-02	0.00000E+00	0.00000E+00

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 3  
LOADTYPE LIVE TITLE CV MAX

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).  
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.162116469E+02  
Y = 0.389999989E+01  
Z = 0.116745460E+02

\*\*\*TOTAL APPLIED LOAD ( MTON METE ) SUMMARY (LOADING 3 )

SUMMATION FORCE-X = 0.00  
SUMMATION FORCE-Y = -59.89  
SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-

MX= 699.16 MY= 0.00 MZ= -970.87

\*\*\*TOTAL REACTION LOAD( MTON METE ) SUMMARY (LOADING 3 )

SUMMATION FORCE-X = 0.00  
 SUMMATION FORCE-Y = 59.89  
 SUMMATION FORCE-Z = -0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-

MX= -699.16 MY= -0.00 MZ= 970.87

MAXIMUM DISPLACEMENTS ( CM /RADIANS) (LOADING 3)

MAXIMUMS AT NODE  
 X = 2.20501E-03 42  
 Y = -4.76350E-01 72  
 Z = 5.92089E-04 32  
 RX= -7.72708E-04 60  
 RY= 8.72963E-07 61  
 RZ= -1.06274E-03 70

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY ( MTON METE )-

JT	EXT FX/	EXT FY/	EXT FZ/	EXT MX/	EXT MY/	EXT MZ/			
	INT FX	INT FY	INT FZ	INT MX	INT MY	INT MZ			
								SUPPORT=1	
1	0.00	0.00	0.00	0.00	0.00	0.00			
	-0.19	-0.73	-0.07	-0.09	0.00	0.21	111111		
2	0.00	-0.30	0.00	0.30	0.00	0.00			
	0.19	0.30	0.07	-0.30	-0.00	0.00	000000		
3	0.00	0.00	0.00	0.00	0.00	0.00			
	0.03	-1.59	-0.15	-0.19	0.00	-0.04	111111		
4	0.00	-0.60	0.00	0.60	0.00	0.00			
	-0.03	0.60	0.15	-0.60	-0.00	0.00	000000		
5	0.00	0.00	0.00	0.00	0.00	0.00			
	-0.56	-2.49	-0.15	-0.20	0.00	0.64	111111		
6	0.00	-0.60	0.00	0.60	0.00	0.00			
	0.56	0.60	0.15	-0.60	-0.00	-0.00	000000		
7	0.00	0.00	0.00	0.00	0.00	0.00			
	0.68	-1.84	-0.08	-0.10	0.00	-0.79	111111		
8	0.00	-0.22	0.00	0.17	0.00	0.00			
	-0.68	0.22	0.08	-0.17	-0.00	-0.00	000000		
9	0.00	0.00	0.00	0.00	0.00	0.00			
	0.10	-0.57	-0.05	-0.07	0.00	-0.12	111111		
11	0.00	0.00	0.00	0.00	0.00	0.00			
	-0.54	-1.91	0.01	0.02	0.00	0.62	111111		
12	0.00	-0.60	0.00	0.00	0.00	0.00			
	0.54	0.60	-0.01	-0.00	-0.00	0.00	000000		
13	0.00	0.00	0.00	0.00	0.00	0.00			
	0.42	-2.68	0.07	0.09	0.00	-0.49	111111		
14	0.00	-0.90	0.00	-0.30	0.00	0.00			
	-0.42	0.90	-0.07	0.30	-0.00	-0.00	000000		
15	0.00	0.00	0.00	0.00	0.00	0.00			

STAAD SPACE						-- PAGE NO. 42	
17	0.00	0.00	0.00	0.00	0.00	0.00	
	1.55	-5.58	-0.02	-0.03	0.00	-1.81	111111
18	0.00	-0.75	0.00	0.56	0.00	0.00	
	-1.55	0.75	0.02	-0.56	-0.00	-0.00	000000
19	0.00	0.00	0.00	0.00	0.00	0.00	
	0.24	-1.29	-0.01	-0.01	0.00	-0.28	111111
20	0.00	-0.53	0.00	0.07	0.00	0.00	
	-0.24	0.53	0.01	-0.07	-0.00	0.00	000000
21	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.55	-1.93	-0.01	-0.01	0.00	0.63	111111
22	0.00	-0.60	0.00	0.00	0.00	0.00	
	0.55	0.60	0.01	-0.00	-0.00	0.00	000000
23	0.00	0.00	0.00	0.00	0.00	0.00	
	0.57	-1.88	-0.01	-0.01	0.00	-0.67	111111
24	0.00	-0.60	0.00	0.00	0.00	0.00	
	-0.57	0.60	0.01	-0.00	-0.00	0.00	000000
25	0.00	0.00	0.00	0.00	0.00	0.00	
	-1.84	-3.37	0.00	0.00	0.00	2.12	111111
26	0.00	-0.60	0.00	0.00	0.00	0.00	
	1.84	0.60	-0.00	-0.00	-0.00	-0.00	000000
27	0.00	0.00	0.00	0.00	0.00	0.00	
	1.26	-5.92	0.00	0.00	0.00	-1.47	111111
28	0.00	-1.20	0.00	0.00	0.00	0.00	
	-1.26	1.20	-0.00	-0.00	-0.00	0.00	000000
29	0.00	0.00	0.00	0.00	0.00	0.00	
	0.35	-1.58	-0.00	-0.00	0.00	-0.42	111111
30	0.00	-0.60	0.00	0.00	0.00	0.00	
	-0.35	0.60	0.00	-0.00	-0.00	-0.00	000000
31	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.18	-0.75	0.07	0.10	0.00	0.20	111111
32	0.00	-0.30	0.00	-0.30	0.00	0.00	
	0.18	0.30	-0.07	0.30	-0.00	-0.00	000000
33	0.00	0.00	0.00	0.00	0.00	0.00	
	0.12	-1.48	-0.01	-0.01	0.00	-0.16	111111
34	0.00	-0.60	0.00	0.00	0.00	0.00	
	-0.12	0.60	-0.06	0.00	0.00	-0.00	000000
35	0.00	0.00	0.00	0.00	0.00	0.00	
	-1.59	-5.10	-0.07	-0.09	0.00	1.83	111111
36	0.00	-0.90	0.00	0.30	0.00	0.00	
	1.59	0.90	0.07	-0.30	-0.00	0.00	000000
37	0.00	0.00	0.00	0.00	0.00	0.00	
	1.38	-6.28	-0.02	-0.03	0.00	-1.62	111111
38	0.00	-1.20	0.00	0.00	0.00	0.00	
	-1.38	1.20	0.02	-0.00	-0.00	-0.00	000000
39	0.00	0.00	0.00	0.00	0.00	0.00	



STAAD SPACE		-- PAGE NO.		43			
46	0.00	-0.60	0.00	-0.60	0.00	0.00	
	-0.57	0.60	-0.14	0.60	-0.00	0.00	000000
47	0.00	0.00	0.00	0.00	0.00	0.00	
	0.13	-0.62	0.07	0.09	0.00	-0.17	111111
48	0.00	-0.30	0.00	-0.30	0.00	0.00	
	-0.13	0.30	-0.07	0.30	-0.00	-0.00	000000

FOR LOADING - 4  
 APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
2	0.00000E+00	-2.10000E-01	0.00000E+00	2.10000E-01	0.00000E+00	0.00000E+00
4	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
6	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
8	0.00000E+00	-1.57500E-01	0.00000E+00	1.18125E-01	0.00000E+00	0.00000E+00
10	0.00000E+00	-1.59000E-01	0.00000E+00	1.59000E-01	0.00000E+00	0.00000E+00
12	0.00000E+00	-4.20000E-01	0.00000E+00	2.19750E-08	0.00000E+00	0.00000E+00
14	0.00000E+00	-6.30000E-01	0.00000E+00	-2.10000E-01	0.00000E+00	0.00000E+00
16	0.00000E+00	-6.30000E-01	0.00000E+00	-2.10000E-01	0.00000E+00	0.00000E+00
18	0.00000E+00	-5.25000E-01	0.00000E+00	3.93750E-01	0.00000E+00	0.00000E+00
20	0.00000E+00	-3.69000E-01	0.00000E+00	5.10000E-02	0.00000E+00	0.00000E+00
22	0.00000E+00	-4.20000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
24	0.00000E+00	-4.20000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
26	0.00000E+00	-4.20000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
28	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
30	0.00000E+00	-4.20000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
32	0.00000E+00	-2.10000E-01	0.00000E+00	-2.10000E-01	0.00000E+00	0.00000E+00
34	0.00000E+00	-4.20000E-01	0.00000E+00	-2.19750E-08	0.00000E+00	0.00000E+00
36	0.00000E+00	-6.30000E-01	0.00000E+00	2.10000E-01	0.00000E+00	0.00000E+00
38	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
40	0.00000E+00	-4.20000E-01	0.00000E+00	-2.19750E-08	0.00000E+00	0.00000E+00
42	0.00000E+00	-2.10000E-01	0.00000E+00	-2.10000E-01	0.00000E+00	0.00000E+00
44	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
46	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
48	0.00000E+00	-2.10000E-01	0.00000E+00	-2.10000E-01	0.00000E+00	0.00000E+00
49	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
50	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
51	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
52	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
53	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
54	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
55	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
56	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
57	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
58	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
59	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
60	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
61	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
62	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
63	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
64	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
65	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
66	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
67	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
68	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
69	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
70	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
71	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
72	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
73	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
74	0.00000E+00	-8.40000E-01	0.00000E+00	4.39501E-08	0.00000E+00	0.00000E+00
75	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
76	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
77	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
78	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
79	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
80	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
81	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
82	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
83	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
84	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
85	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
86	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
87	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
88	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
89	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
90	0.00000E+00	-1.19250E-01	0.00000E+00	8.94375E-02	0.00000E+00	0.00000E+00
91	0.00000E+00	-3.15000E-01	0.00000E+00	3.15000E-01	0.00000E+00	0.00000E+00
92	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
93	0.00000E+00	-4.20000E-01	0.00000E+00	4.20000E-01	0.00000E+00	0.00000E+00
94	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
95	0.00000E+00	-8.40000E-01	0.00000E+00	8.79001E-08	0.00000E+00	0.00000E+00
96	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
97	0.00000E+00	-8.40000E-01	0.00000E+00	-4.39501E-08	0.00000E+00	0.00000E+00
98	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
99	0.00000E+00	-4.20000E-01	0.00000E+00	-4.20000E-01	0.00000E+00	0.00000E+00
105	0.00000E+00	-3.15000E-01	0.00000E+00	-3.15000E-01	0.00000E+00	0.00000E+00
107	0.00000E+00	-7.87500E-02	0.00000E+00	-1.96875E-02	0.00000E+00	0.00000E+00
108	0.00000E+00	-2.62500E-01	0.00000E+00	-9.18750E-02	0.00000E+00	0.00000E+00
109	0.00000E+00	-1.98000E-01	0.00000E+00	-6.97500E-02	0.00000E+00	0.00000E+00
110	0.00000E+00	-7.87500E-02	0.00000E+00	1.96875E-02	0.00000E+00	0.00000E+00
111	0.00000E+00	-7.87500E-02	0.00000E+00	-1.96875E-02	0.00000E+00	0.00000E+00

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 4  
 LOADTYPE LIVE TITLE CV INST

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).  
 (FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.162132124E+02  
 Y = 0.389999989E+01  
 Z = 0.116734196E+02

\*\*\*TOTAL APPLIED LOAD ( MTON METE ) SUMMARY (LOADING 4 )  
 SUMMATION FORCE-X = 0.00  
 SUMMATION FORCE-Y = -41.93  
 SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= 489.43 MY= 0.00 MZ= -679.76

\*\*\*TOTAL REACTION LOAD( MTON METE ) SUMMARY (LOADING 4 )  
 SUMMATION FORCE-X = 0.00  
 SUMMATION FORCE-Y = 41.93  
 SUMMATION FORCE-Z = -0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= -489.43 MY= -0.00 MZ= 679.76

MAXIMUM DISPLACEMENTS ( CM /RADIANS) (LOADING 4)  
 MAXIMUMS AT NODE  
 X = 1.54246E-03 42  
 Y = -3.33437E-01 72  
 Z = 4.15111E-04 32  
 RX= -5.40896E-04 60  
 RY= 6.10694E-07 61  
 RZ= -7.43903E-04 70

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY ( MTON METE )-

JT	EXT FX/	EXT FY/	EXT FZ/	EXT MX/	EXT MY/	EXT MZ/	
	INT FX	INT FY	INT FZ	INT MX	INT MY	INT MZ	
	SUPPORT=1						
1	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.13	-0.51	-0.05	-0.06	0.00	0.15	111111
2	0.00	-0.21	0.00	0.21	0.00	0.00	
	0.13	0.21	0.05	-0.21	-0.00	0.00	000000
3	0.00	0.00	0.00	0.00	0.00	0.00	
	0.02	-1.11	-0.11	-0.13	0.00	-0.03	111111
4	0.00	-0.42	0.00	0.42	0.00	0.00	
	-0.02	0.42	0.11	-0.42	-0.00	-0.00	000000
5	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.39	-1.74	-0.11	-0.14	0.00	0.45	111111
6	0.00	-0.42	0.00	0.42	0.00	0.00	
	0.39	0.42	0.11	-0.42	-0.00	-0.00	000000
7	0.00	0.00	0.00	0.00	0.00	0.00	
	0.47	-1.29	-0.05	-0.07	0.00	-0.55	111111
8	0.00	-0.16	0.00	0.12	0.00	0.00	
	-0.47	0.16	0.05	-0.12	-0.00	-0.00	000000
9	0.00	0.00	0.00	0.00	0.00	0.00	
	0.07	-0.40	-0.04	-0.05	0.00	-0.09	111111
11	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.38	-1.34	0.01	0.01	0.00	0.43	111111
12	0.00	-0.42	0.00	0.00	0.00	0.00	
	0.38	0.42	-0.01	-0.00	-0.00	0.00	000000
13	0.00	0.00	0.00	0.00	0.00	0.00	
	0.29	-1.87	0.05	0.07	0.00	-0.34	111111

STAAD SPACE						-- PAGE NO. 46	
15	0.00	0.00	0.00	0.00	0.00	0.00	
	-1.15	-3.55	0.05	0.06	0.00	1.32	111111
16	0.00	-0.63	0.00	-0.21	0.00	0.00	
	1.15	0.63	-0.05	0.21	-0.00	0.00	000000
17	0.00	0.00	0.00	0.00	0.00	0.00	
	1.09	-3.91	-0.02	-0.02	0.00	-1.27	111111
18	0.00	-0.52	0.00	0.39	0.00	0.00	
	-1.09	0.52	0.02	-0.39	-0.00	-0.00	000000
19	0.00	0.00	0.00	0.00	0.00	0.00	
	0.16	-0.91	-0.01	-0.01	0.00	-0.20	111111
20	0.00	-0.37	0.00	0.05	0.00	0.00	
	-0.16	0.37	0.01	-0.05	-0.00	0.00	000000
21	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.38	-1.35	-0.01	-0.00	0.00	0.44	111111
22	0.00	-0.42	0.00	0.00	0.00	0.00	
	0.38	0.42	0.01	-0.00	-0.00	-0.00	000000
23	0.00	0.00	0.00	0.00	0.00	0.00	
	0.40	-1.31	-0.00	-0.00	0.00	-0.47	111111
24	0.00	-0.42	0.00	0.00	0.00	0.00	
	-0.40	0.42	0.00	-0.00	-0.00	-0.00	000000
25	0.00	0.00	0.00	0.00	0.00	0.00	
	-1.28	-2.36	0.00	0.00	0.00	1.48	111111
26	0.00	-0.42	0.00	0.00	0.00	0.00	
	1.28	0.42	-0.00	-0.00	-0.00	0.00	000000
27	0.00	0.00	0.00	0.00	0.00	0.00	
	0.88	-4.14	0.00	0.00	0.00	-1.03	111111
28	0.00	-0.84	0.00	0.00	0.00	0.00	
	-0.88	0.84	-0.00	-0.00	-0.00	0.00	000000
29	0.00	0.00	0.00	0.00	0.00	0.00	
	0.25	-1.11	-0.00	-0.00	0.00	-0.30	111111
30	0.00	-0.42	0.00	0.00	0.00	0.00	
	-0.25	0.42	0.00	-0.00	-0.00	-0.00	000000
31	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.13	-0.52	0.05	0.07	0.00	0.14	111111
32	0.00	-0.21	0.00	-0.21	0.00	0.00	
	0.13	0.21	-0.05	0.21	-0.00	-0.00	000000
33	0.00	0.00	0.00	0.00	0.00	0.00	
	0.09	-1.03	-0.00	-0.00	0.00	-0.11	111111
35	0.00	0.00	0.00	0.00	0.00	0.00	
	-1.11	-3.57	-0.05	-0.06	0.00	1.28	111111
36	0.00	-0.63	0.00	0.21	0.00	0.00	
	1.11	0.63	0.05	-0.21	-0.00	-0.00	000000
37	0.00	0.00	0.00	0.00	0.00	0.00	
	0.97	-4.40	-0.01	-0.02	0.00	-1.13	111111
38	0.00	-0.84	0.00	-0.00	0.00	0.00	

STAAD SPACE		-- PAGE NO.		47			
45	0.00	0.00	0.00	0.00	0.00	0.00	
	0.40	-1.67	0.10	0.12	0.00	-0.48	111111
46	0.00	-0.42	0.00	-0.42	0.00	0.00	
	-0.40	0.42	-0.10	0.42	-0.00	0.00	000000
47	0.00	0.00	0.00	0.00	0.00	0.00	
	0.09	-0.43	0.05	0.06	0.00	-0.12	111111

FOR LOADING - 5  
 APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
2	0.00000E+00	-4.50000E-02	0.00000E+00	4.50000E-02	0.00000E+00	0.00000E+00
4	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
6	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
8	0.00000E+00	-3.37500E-02	0.00000E+00	2.53125E-02	0.00000E+00	0.00000E+00
10	0.00000E+00	-3.30000E-02	0.00000E+00	3.30000E-02	0.00000E+00	0.00000E+00
12	0.00000E+00	-9.00000E-02	0.00000E+00	2.74688E-09	0.00000E+00	0.00000E+00
14	0.00000E+00	-1.35000E-01	0.00000E+00	-4.50000E-02	0.00000E+00	0.00000E+00
16	0.00000E+00	-1.35000E-01	0.00000E+00	-4.50000E-02	0.00000E+00	0.00000E+00
18	0.00000E+00	-1.12500E-01	0.00000E+00	8.43750E-02	0.00000E+00	0.00000E+00
20	0.00000E+00	-7.80000E-02	0.00000E+00	1.20000E-02	0.00000E+00	0.00000E+00
22	0.00000E+00	-9.00000E-02	0.00000E+00	8.24064E-09	0.00000E+00	0.00000E+00
24	0.00000E+00	-9.00000E-02	0.00000E+00	8.24064E-09	0.00000E+00	0.00000E+00
26	0.00000E+00	-9.00000E-02	0.00000E+00	8.24064E-09	0.00000E+00	0.00000E+00
28	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
30	0.00000E+00	-9.00000E-02	0.00000E+00	8.24064E-09	0.00000E+00	0.00000E+00
32	0.00000E+00	-4.50000E-02	0.00000E+00	-4.50000E-02	0.00000E+00	0.00000E+00
34	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
36	0.00000E+00	-1.35000E-01	0.00000E+00	4.50000E-02	0.00000E+00	0.00000E+00
38	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
40	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
42	0.00000E+00	-4.50000E-02	0.00000E+00	-4.50000E-02	0.00000E+00	0.00000E+00
44	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
46	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
48	0.00000E+00	-4.50000E-02	0.00000E+00	-4.50000E-02	0.00000E+00	0.00000E+00
49	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
50	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
51	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00
52	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00
53	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
54	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
55	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
56	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
57	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
58	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
59	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
60	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
61	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
62	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
63	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
64	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
65	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
66	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
67	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
68	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
69	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
70	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
71	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00
72	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00
73	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00
74	0.00000E+00	-1.80000E-01	0.00000E+00	5.49376E-09	0.00000E+00	0.00000E+00
75	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
76	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
77	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
78	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
79	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
80	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
81	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
82	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
83	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
84	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
85	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
86	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
87	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
88	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
89	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
90	0.00000E+00	-2.47500E-02	0.00000E+00	1.85625E-02	0.00000E+00	0.00000E+00
91	0.00000E+00	-6.60000E-02	0.00000E+00	6.60000E-02	0.00000E+00	0.00000E+00
92	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
93	0.00000E+00	-9.00000E-02	0.00000E+00	9.00000E-02	0.00000E+00	0.00000E+00
94	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
95	0.00000E+00	-1.80000E-01	0.00000E+00	1.64813E-08	0.00000E+00	0.00000E+00
96	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
97	0.00000E+00	-1.80000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
98	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
99	0.00000E+00	-9.00000E-02	0.00000E+00	-9.00000E-02	0.00000E+00	0.00000E+00
105	0.00000E+00	-6.60000E-02	0.00000E+00	-6.60000E-02	0.00000E+00	0.00000E+00
107	0.00000E+00	-1.65000E-02	0.00000E+00	-4.12500E-03	0.00000E+00	0.00000E+00
108	0.00000E+00	-5.62500E-02	0.00000E+00	-1.96875E-02	0.00000E+00	0.00000E+00
109	0.00000E+00	-4.12500E-02	0.00000E+00	-1.44375E-02	0.00000E+00	0.00000E+00
110	0.00000E+00	-1.65000E-02	0.00000E+00	4.12500E-03	0.00000E+00	0.00000E+00
111	0.00000E+00	-1.65000E-02	0.00000E+00	-4.12500E-03	0.00000E+00	0.00000E+00

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 5  
 LOADTYPE LIVE TITLE CV MEDIA

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).  
 (FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.162022059E+02  
 Y = 0.389999989E+01  
 Z = 0.116811498E+02

\*\*\*TOTAL APPLIED LOAD ( MTON METE ) SUMMARY (LOADING 5 )  
 SUMMATION FORCE-X = 0.00  
 SUMMATION FORCE-Y = -8.98  
 SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= 104.85 MY= 0.00 MZ= -145.43

\*\*\*TOTAL REACTION LOAD( MTON METE ) SUMMARY (LOADING 5 )  
 SUMMATION FORCE-X = 0.00  
 SUMMATION FORCE-Y = 8.98  
 SUMMATION FORCE-Z = -0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= -104.85 MY= -0.00 MZ= 145.43

MAXIMUM DISPLACEMENTS ( CM /RADIANS) (LOADING 5)  
 MAXIMUMS AT NODE  
 X = 3.31836E-04 42  
 Y = -7.14724E-02 72  
 Z = 8.58898E-05 32  
 RX= -1.15907E-04 60  
 RY= 1.29330E-07 61  
 RZ= -1.59446E-04 70

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY ( MTON METE )-

JT	EXT FX/	EXT FY/	EXT FZ/	EXT MX/	EXT MY/	EXT MZ/	
	INT FX	INT FY	INT FZ	INT MX	INT MY	INT MZ	
	SUPPORT=1						
1	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.03	-0.11	-0.01	-0.01	0.00	0.03	111111
3	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	-0.24	-0.02	-0.03	0.00	-0.01	111111
5	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.08	-0.37	-0.02	-0.03	0.00	0.10	111111
7	0.00	0.00	0.00	0.00	0.00	0.00	
	0.10	-0.27	-0.01	-0.02	0.00	-0.12	111111
8	0.00	-0.03	0.00	0.03	0.00	0.00	
	-0.10	0.03	0.01	-0.03	-0.00	0.00	000000
11	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.08	-0.29	0.00	0.00	0.00	0.09	111111
13	0.00	0.00	0.00	0.00	0.00	0.00	
	0.06	-0.40	0.01	0.01	0.00	-0.07	111111
15	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.25	-0.76	0.01	0.01	0.00	0.28	111111
16	0.00	-0.14	0.00	-0.04	0.00	0.00	
	0.25	0.14	-0.01	0.04	-0.00	0.00	000000
17	0.00	0.00	0.00	0.00	0.00	0.00	
	0.23	-0.84	-0.00	-0.00	0.00	-0.27	111111
18	0.00	-0.11	0.00	0.08	0.00	0.00	
	-0.23	0.11	0.00	-0.08	-0.00	-0.00	000000
19	0.00	0.00	0.00	0.00	0.00	0.00	
	0.03	-0.19	-0.00	-0.00	0.00	-0.04	111111

STAAD SPACE	-- PAGE NO. 50						
23	0.00	0.00	0.00	0.00	0.00	0.00	
	0.08	-0.28	-0.00	-0.00	0.00	-0.10	111111
25	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.28	-0.51	0.00	0.00	0.00	0.32	111111
26	0.00	-0.09	0.00	0.00	0.00	0.00	
	0.28	0.09	-0.00	-0.00	-0.00	0.00	000000
27	0.00	0.00	0.00	0.00	0.00	0.00	
	0.19	-0.89	0.00	0.00	0.00	-0.22	111111
28	0.00	-0.18	0.00	0.00	0.00	0.00	
	-0.19	0.18	-0.00	-0.00	-0.00	0.00	000000
29	0.00	0.00	0.00	0.00	0.00	0.00	
	0.05	-0.24	-0.00	-0.00	0.00	-0.06	111111
31	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.03	-0.11	0.01	0.01	0.00	0.03	111111
33	0.00	0.00	0.00	0.00	0.00	0.00	
	0.02	-0.22	-0.00	-0.00	0.00	-0.02	111111
35	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.24	-0.76	-0.01	-0.01	0.00	0.27	111111
36	0.00	-0.13	0.00	0.04	0.00	0.00	
	0.24	0.13	0.01	-0.04	-0.00	-0.00	000000
37	0.00	0.00	0.00	0.00	0.00	0.00	
	0.21	-0.94	-0.00	-0.00	0.00	-0.24	111111
38	0.00	-0.18	0.00	0.00	0.00	0.00	
	-0.21	0.18	0.00	-0.00	-0.00	0.00	000000
39	0.00	0.00	0.00	0.00	0.00	0.00	
	0.05	-0.24	-0.00	-0.00	0.00	-0.06	111111
41	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.02	-0.11	0.01	0.01	0.00	0.02	111111
43	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.08	-0.38	0.02	0.03	0.00	0.08	111111
45	0.00	0.00	0.00	0.00	0.00	0.00	
	0.09	-0.36	0.02	0.03	0.00	-0.10	111111

FOR LOADING - 6

APPLIED JOINT EQUIVALENT LOADS

JOINT	FORCE-X	FORCE-Y	FORCE-Z	MOM-X	MOM-Y	MOM-Z
94	0.00000E+00	-7.50000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
95	0.00000E+00	-7.50000E-01	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

STATIC LOAD/REACTION/EQUILIBRIUM SUMMARY FOR CASE NO. 6  
LOADTYPE LIVE TITLE EQUIPOS

CENTER OF FORCE BASED ON Y FORCES ONLY (METE).  
(FORCES IN NON-GLOBAL DIRECTIONS WILL INVALIDATE RESULTS)

X = 0.269999997E+02  
Y = 0.389999989E+01  
Z = 0.119999999E+02

\*\*\*TOTAL APPLIED LOAD ( MTON METE ) SUMMARY (LOADING 6 )  
SUMMATION FORCE-X = 0.00



SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= 18.00 MY= 0.00 MZ= -40.50

\*\*\*TOTAL REACTION LOAD( MTON METE ) SUMMARY (LOADING 6 )  
 SUMMATION FORCE-X = -0.00  
 SUMMATION FORCE-Y = 1.50  
 SUMMATION FORCE-Z = 0.00

SUMMATION OF MOMENTS AROUND THE ORIGIN-  
 MX= -18.00 MY= 0.00 MZ= 40.50

MAXIMUM DISPLACEMENTS ( CM /RADIANS) (LOADING 6 )  
 MAXIMUMS AT NODE  
 X = -5.98492E-04 44  
 Y = -4.28944E-02 95  
 Z = -3.51863E-05 32  
 RX= 1.07734E-04 93  
 RY= -2.47136E-08 64  
 RZ= -1.53491E-04 94

EXTERNAL AND INTERNAL JOINT LOAD SUMMARY ( MTON METE )-

JT	EXT FX/	EXT FY/	EXT FZ/	EXT MX/	EXT MY/	EXT MZ/	
	INT FX	INT FY	INT FZ	INT MX	INT MY	INT MZ	
							SUPPORT=1
27	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.21	-0.78	0.00	0.00	-0.00	0.25	111111
28	0.00	0.00	0.00	0.00	0.00	0.00	
	0.21	-0.00	-0.00	0.00	0.00	0.00	000000
29	0.00	0.00	0.00	0.00	0.00	0.00	
	0.28	-0.69	0.00	0.00	-0.00	-0.32	111111
30	0.00	0.00	0.00	0.00	0.00	0.00	
	-0.28	-0.00	-0.00	-0.00	0.00	0.00	000000

LOAD COMBINATION NO. 10  
 1.0 (PP+CM+CVMAX+EQ)

LOADING- 1. 2. 3. 6.  
 FACTOR - 1.00 1.00 1.00 1.00

LOAD COMBINATION NO. 11  
 1.0 (PP+CM+CVINST+EQ+ SX+ 0.3 SZ)

LOADING- 1. 2. 4. 6. 7. 8.  
 FACTOR - 1.00 1.00 1.00 1.00 1.00 0.30

LOAD COMBINATION NO. 12  
 1.0 (PP+CM+CVINST+EQ+ SX- 0.3 SZ)

LOADING- 1. 2. 4. 6. 7. 8.  
 FACTOR - 1.00 1.00 1.00 1.00 1.00 -0.30

STAAD SPACE

-- PAGE NO. 52

LOAD COMBINATION NO. 13

1.0 (PP+CM+CVINST+EQ- SX+ 0.3 SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.00	1.00	1.00	1.00	-1.00	0.30

LOAD COMBINATION NO. 14

1.0 (PP+CM+CVINST+EQ- SX- 0.3 SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.00	1.00	1.00	1.00	-1.00	-0.30

LOAD COMBINATION NO. 15

1.0 (PP+CM+CVINST+EQ+ 0.3 SX+ SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.00	1.00	1.00	1.00	0.30	1.00

LOAD COMBINATION NO. 16

1.0 (PP+CM+CVINST+EQ+ 0.3 SX- SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.00	1.00	1.00	1.00	0.30	-1.00

LOAD COMBINATION NO. 17

1.0 (PP+CM+CVINST+EQ- 0.3 SX+ SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.00	1.00	1.00	1.00	-0.30	1.00

LOAD COMBINATION NO. 18

1.0 (PP+CM+CVINST+EQ- 0.3 SX- SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.00	1.00	1.00	1.00	-0.30	-1.00

LOAD COMBINATION NO. 20

1.4 (PP+CM+CVMAX+EQ)

LOADING-	1.	2.	3.	6.
FACTOR -	1.40	1.40	1.40	1.40

LOAD COMBINATION NO. 21

1.1 (PP+CM+CVINST+EQ+ SX+ 0.33 SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	1.10	0.33

LOAD COMBINATION NO. 22

1.1 (PP+CM+CVINST+EQ+ SX- 0.33 SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	1.10	-0.33

STAAD SPACE

-- PAGE NO. 53

LOAD COMBINATION NO. 23

1.1 (PP+CM+CVINST+EQ- SX+ 0.33 SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	-1.10	0.33

LOAD COMBINATION NO. 24

1.1 (PP+CM+CVINST+EQ- SX- 0.33 SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	-1.10	-0.33

LOAD COMBINATION NO. 25

1.1 (PP+CM+CVINST+EQ+ 0.33 SX+ SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	0.33	1.10

LOAD COMBINATION NO. 26

1.1 (PP+CM+CVINST+EQ+ 0.33 SX- SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	0.33	-1.10

LOAD COMBINATION NO. 27

1.1 (PP+CM+CVINST+EQ- 0.33 SX+ SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	-0.33	1.10

LOAD COMBINATION NO. 28

1.1 (PP+CM+CVINST+EQ- 0.33 SX- SZ)

LOADING-	1.	2.	4.	6.	7.	8.
FACTOR -	1.10	1.10	1.10	1.10	-0.33	-1.10

LOAD COMBINATION NO. 30

1.0 (PP+CM+CVINST)

LOADING-	1.	2.	4.
FACTOR -	1.00	1.00	1.00

LOAD COMBINATION NO. 31

1.0 (PP+CM+CVMED+EQ)

LOADING-	1.	2.	5.	6.
FACTOR -	1.00	1.00	1.00	1.00

LOAD COMBINATION NO. 32

1.0 (PP+CM+CVINST+EQ)

LOADING-	1.	2.	4.	6.
FACTOR -	1.00	1.00	1.00	1.00

\*\*\*\*\* END OF DATA FROM INTERNAL STORAGE \*\*\*\*\*

- 268. LOAD LIST 20 TO 28
- 269. PARAMETER 1
- 270. CODE LRFD
- 271. \*FU 40800 ALL
- 272. \*FYLD 25300 ALL
- 273. FU 45700 ALL
- 274. FYLD 35150 ALL
- 275. CHECK CODE ALL

STAAD.Pro CODE CHECKING - (LRFD 3RD EDITION) v1.0  
 \*\*\*\*\*

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE Noted)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
1	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.144	28
		4.67 C	-3.17	-4.42	0.00
2	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.149	28
		10.16 C	-3.71	-3.17	0.00
3	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.277	20
		21.30 C	3.34	13.23	3.90
4	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.261	20
		16.08 C	1.77	-15.67	3.90
5	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.121	28
		3.75 C	-3.36	-2.26	0.00
6	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.202	27
		12.09 C	-2.62	9.53	3.90
7	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.217	25
		16.69 C	-3.52	-8.45	3.90
8	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.565	20
		43.20 C	-1.48	38.20	3.90
9	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.515	20
		47.62 C	0.44	-35.95	3.90
10	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.147	25
		9.31 C	3.26	4.02	0.00
11	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.209	28
		12.54 C	2.58	10.12	3.90
12	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.202	26
		11.73 C	2.33	-10.16	3.90
13	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.569	20
		28.92 C	-0.01	42.87	3.90
14	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.417	20
		51.25 C	-0.08	-28.60	3.90
15	ST	W14X90	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.173	25
		10.57 C	-2.58	-7.47	3.90

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
16	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.125	27
		4.57 C	-2.85	3.58	3.90
17	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.134	25
		10.42 C	2.91	3.68	0.00
18	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.553	20
		43.42 C	1.46	37.21	3.90
19	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.472	20
		53.27 C	0.43	-32.09	3.90
20	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.163	25
		9.73 C	-2.54	-6.80	3.90
21	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.119	25
		6.03 C	3.14	2.35	0.00
22	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.263	20
		21.72 C	-3.35	12.05	3.90
23	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.274	25
		14.45 C	-4.08	-11.98	3.90
24	ST W14X90		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.152	25
		5.27 C	3.45	4.41	0.00
25	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.466	25
		0.20 C	1.00	4.50	0.00
26	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.336	25
		0.22 C	0.48	4.95	0.00
27	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.909	25
		0.77 C	1.84	18.15	0.00
28	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.407	25
		0.09 C	0.31	6.72	0.00
29	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.717	25
		0.36 C	1.08	10.17	0.00
30	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.295	25
		0.19 C	0.48	3.92	0.00

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
31	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.894	25
		0.90 C	4.69	41.94	0.00
32	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.741	20
		0.00 C	0.00	20.08	0.00
33	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.716	25
		0.29 C	1.09	10.12	0.00
34	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.792	25
		0.73 C	4.69	33.46	0.00
35	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.824	20
		0.00 C	0.00	26.33	0.00
36	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.475	25
		0.18 C	1.83	4.41	0.00
37	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.230	25
		0.19 C	0.42	2.72	0.00
38	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.891	25
		0.92 C	4.69	41.61	0.00
39	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.815	20
		0.00 C	0.00	26.01	0.00
40	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.182	21
		2.66 C	0.07	5.13	0.00
41	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.907	25
		0.79 C	1.84	18.10	0.00
42	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.421	25
		0.24 C	0.78	8.87	0.00
43	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.440	28
		0.00 C	0.00	3.53	6.00
44	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.386	28
		0.00 C	0.00	3.10	6.00
45	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.436	25
		0.00 C	0.00	3.50	0.00

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE Noted)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
46	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.627	28
		0.00 C	0.00	5.03	6.00
47	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.460	25
		0.00 C	0.00	3.69	0.00
48	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.391	28
		0.00 C	0.00	3.13	6.00
49	ST W16X36	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.297	25
		1.28 C	0.11	3.65	0.00
50	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.622	28
		0.00 C	0.00	4.99	6.00
51	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.459	25
		0.00 C	0.00	3.68	0.00
52	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.460	28
		0.00 C	0.00	3.69	6.00
53	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.622	25
		0.00 C	0.00	4.98	0.00
54	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.285	25
		0.12 C	0.14	3.01	0.00
55	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.625	20
		0.00 C	0.00	5.01	6.00
56	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.647	20
		0.00 C	0.00	5.19	6.00
57	ST W16X36	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.412	25
		0.00 C	0.00	5.72	0.00
58	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.408	28
		0.00 C	0.00	3.27	6.00
59	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.399	28
		0.00 C	0.00	3.20	6.00
60	ST W16X31	PASS	(AISC SECTIONS) LRFD-H1-1B-C	0.406	28
		0.00 C	0.00	3.25	6.00



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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
61	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.459	25
		0.00 C	0.00	3.68	0.00
62	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.206	28
		0.09 T	-0.30	-2.99	0.00
63	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.506	28
		0.25 C	0.99	5.55	2.00
64	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.362	20
		0.00 C	0.00	-9.08	0.00
65	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.754	28
		0.35 C	1.08	11.12	2.00
66	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.363	20
		0.00 C	0.00	-9.12	0.50
67	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.719	28
		0.29 C	1.08	10.24	2.00
68	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.224	28
		0.09 T	-0.70	-3.06	0.00
69	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.495	28
		0.22 C	1.82	5.10	2.00
70	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.558	20
		0.00 C	0.00	5.57	6.00
71	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.557	20
		0.00 C	0.00	5.56	6.00
72	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.558	20
		0.00 C	0.00	5.57	0.00
73	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.557	20
		0.00 C	0.00	5.55	0.00
74	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.544	20
		0.00 C	0.00	5.43	0.00
75	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.547	20
		0.00 C	0.00	5.46	0.00

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
76	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.148	28
		0.05 T	-0.14	-2.74	0.00
77	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.488	28
		0.23 C	0.48	8.79	2.00
78	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.107	28
		0.05 T	-0.14	-1.71	0.00
79	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.635	28
		0.18 C	0.48	12.47	2.00
80	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.144	28
		0.04 T	-0.17	-2.39	0.00
81	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.658	20
		0.00 C	-0.00	16.51	2.00
82	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.155	28
		0.03 C	-0.25	-3.50	0.00
83	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.430	28
		1.63 C	0.62	9.91	2.00
84	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.746	20
		0.00 C	0.00	-7.45	3.00
85	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.746	20
		0.00 C	0.00	-7.45	3.00
86	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.746	20
		0.00 C	0.00	-7.45	3.00
87	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.746	20
		0.00 T	-0.00	-7.45	3.00
88	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.450	25
		0.34 T	-1.09	-7.96	2.00
89	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.513	25
		0.40 T	-0.92	-10.93	2.00
90	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.512	28
		0.40 T	-0.92	-10.93	0.00

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
93	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.530	25
		0.54 T	-2.54	-26.48	2.00
94	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.611	25
		0.18 T	-2.34	-34.58	2.00
95	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.610	28
		0.18 T	-2.33	-34.58	0.00
96	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.528	28
		0.54 T	-2.55	-26.23	0.00
97	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.905	28
		0.90 C	4.71	42.70	2.00
98	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.696	28
		0.10 C	1.18	4.34	6.00
99	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.618	28
		0.06 C	0.91	4.15	6.00
100	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.537	20
		0.00 C	0.00	5.36	6.00
101	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.606	28
		0.06 C	0.91	4.04	6.00
102	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.683	28
		0.10 C	1.18	4.20	6.00
103	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.519	25
		0.44 T	-2.55	-25.55	2.00
104	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.580	25
		0.15 T	-2.34	-32.07	2.00
105	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.580	28
		0.15 T	-2.33	-32.07	0.00
106	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.490	28
		0.44 T	-2.56	-23.10	0.00
107	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.892	28
		0.73 C	4.71	41.68	2.00

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MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
108	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.698	25
		0.03 C	1.19	4.34	0.00
109	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.619	25
		0.02 C	0.92	4.15	0.00
110	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.537	20
		0.00 C	0.00	5.36	0.00
111	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.607	25
		0.02 C	0.92	4.04	0.00
112	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.685	25
		0.03 C	1.19	4.20	0.00
113	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.529	25
		0.56 T	-2.54	-26.37	2.00
114	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.605	25
		0.19 T	-2.34	-34.08	2.00
115	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.604	28
		0.19 T	-2.33	-34.08	0.00
116	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.518	28
		0.56 T	-2.55	-25.42	0.00
117	ST W21X68		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.925	28
		0.92 C	4.71	44.35	2.00
118	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.699	28
		0.03 C	1.19	4.35	6.00
119	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.622	28
		0.02 C	0.92	4.18	6.00
120	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.547	20
		0.00 C	0.00	5.46	6.00
121	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.615	28
		0.02 C	0.92	4.11	6.00
122	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.691	28
		0.03 C	1.19	4.26	6.00

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
123	ST	W16X36	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.447	25
		0.35 T	-1.09	-7.86	2.00
124	ST	W16X36	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.508	25
		0.40 T	-0.92	-10.77	2.00
125	ST	W16X36	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.507	28
		0.41 T	-0.92	-10.77	0.00
126	ST	W16X36	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.449	28
		0.36 T	-1.10	-7.88	0.00
127	ST	W16X36	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.907	28
		0.76 C	1.85	18.07	2.00
128	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.697	25
		0.10 C	1.18	4.35	0.00
129	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.620	25
		0.06 C	0.91	4.18	0.00
130	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.547	20
		0.00 C	0.00	5.46	0.00
131	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.613	25
		0.06 C	0.91	4.11	0.00
132	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.689	25
		0.10 C	1.18	4.26	0.00
135	ST	W16X31	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.140	20
		0.00 C	0.00	-3.92	1.00
136	ST	W16X31	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.234	28
		0.29 T	-0.26	-4.40	0.00
137	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.239	20
		0.00 C	0.00	-3.76	3.38
138	ST	W14X30	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.566	20
		0.00 C	0.00	-5.64	3.00
139	ST	W16X36	(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.290	20
		0.00 C	0.00	-9.25	2.00

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE Noted)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
140	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.403	28
		0.32 C	0.92	7.47	2.00
141	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.559	20
		0.00 C	0.00	5.58	6.00
142	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.569	20
		0.00 C	0.00	5.67	6.00
143	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.262	25
		0.00 T	-0.29	-6.66	2.00
144	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.382	28
		0.36 C	0.92	6.80	2.00
145	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.598	20
		0.00 C	0.00	5.96	6.00
146	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.582	20
		0.00 C	0.00	5.81	6.00
147	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.152	25
		0.05 T	-0.35	-2.82	2.00
148	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.270	28
		0.22 C	0.86	3.58	2.00
149	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.598	20
		0.00 C	0.00	5.96	0.00
150	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.582	20
		0.00 C	0.00	5.81	0.00
211	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.277	28
		0.16 C	0.57	3.01	1.50
212	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.341	28
		0.45 C	0.55	4.93	1.50
213	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.116	21
		0.02 T	-0.03	-2.92	1.50
214	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.212	28
		0.18 T	-0.36	-3.01	0.00

ALL UNITS ARE - MTON METE (UNLESS OTHERWISE NOTED)

MEMBER	TABLE	RESULT/ FX	CRITICAL COND/ MY	RATIO/ MZ	LOADING/ LOCATION
215	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.454	28
		0.35 T	-1.10	-8.04	0.00
216	ST W16X36		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.902	28
		0.74 C	1.85	17.91	2.00
217	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.261	28
		0.35 C	0.31	4.61	1.50
218	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.157	28
		0.18 T	-0.25	-2.51	0.00
219	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.093	25
		0.16 T	-0.31	-0.57	1.50
220	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-T	0.043	24
		0.12 T	-0.09	-0.58	0.00
221	ST W16X31		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.208	21
		0.69 C	0.11	4.83	0.00
222	ST W14X30		(AISC SECTIONS)		
		PASS	LRFD-H1-1B-C	0.087	28
		0.25 C	0.39	0.02	1.50

\*\*\*\*\* END OF TABULATED RESULT OF DESIGN \*\*\*\*\*

276. STEEL MEMBER TAKE OFF ALL

**STEEL TAKE-OFF**

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PROFILE	LENGTH(METE)	WEIGHT (MTON)
ST W14X90	93.60	12.535
ST W16X31	150.00	6.921
ST W16X36	66.00	3.536
ST W21X68	36.00	3.639
ST W14X30	232.50	10.399
-----		
TOTAL =		37.030

MEMBER	PROFILE	LENGTH (METE)	WEIGHT (MTON)
1	ST W14X90	3.90	0.522
2	ST W14X90	3.90	0.522
3	ST W14X90	3.90	0.522
4	ST W14X90	3.90	0.522
5	ST W14X90	3.90	0.522
6	ST W14X90	3.90	0.522
7	ST W14X90	3.90	0.522
8	ST W14X90	3.90	0.522
9	ST W14X90	3.90	0.522
10	ST W14X90	3.90	0.522
11	ST W14X90	3.90	0.522
12	ST W14X90	3.90	0.522
13	ST W14X90	3.90	0.522
14	ST W14X90	3.90	0.522
15	ST W14X90	3.90	0.522
16	ST W14X90	3.90	0.522
17	ST W14X90	3.90	0.522
18	ST W14X90	3.90	0.522
19	ST W14X90	3.90	0.522
20	ST W14X90	3.90	0.522
21	ST W14X90	3.90	0.522
22	ST W14X90	3.90	0.522
23	ST W14X90	3.90	0.522
24	ST W14X90	3.90	0.522
25	ST W16X31	2.00	0.092
26	ST W16X31	2.00	0.092
27	ST W16X36	2.00	0.107
28	ST W16X31	3.00	0.138
29	ST W16X31	2.00	0.092
30	ST W16X31	2.00	0.092
31	ST W21X68	2.00	0.202
32	ST W16X31	1.50	0.069
33	ST W16X31	2.00	0.092
34	ST W21X68	2.00	0.202
35	ST W16X36	2.00	0.107
36	ST W16X36	2.00	0.107



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37	ST	W16X31	2.00	0.092
38	ST	W21X68	2.00	0.202
39	ST	W16X36	2.00	0.107
40	ST	W16X36	2.00	0.107
41	ST	W16X36	2.00	0.107
42	ST	W16X36	2.00	0.107
43	ST	W16X31	6.00	0.277
44	ST	W16X31	6.00	0.277
45	ST	W16X31	6.00	0.277
46	ST	W16X31	6.00	0.277
47	ST	W16X31	6.00	0.277
48	ST	W16X31	6.00	0.277
49	ST	W16X36	6.00	0.321
50	ST	W16X31	6.00	0.277
51	ST	W16X31	6.00	0.277
52	ST	W16X31	6.00	0.277
53	ST	W16X31	6.00	0.277
54	ST	W16X31	4.50	0.208
55	ST	W16X31	6.00	0.277
56	ST	W16X31	6.00	0.277
57	ST	W16X36	6.00	0.321
58	ST	W16X31	6.00	0.277
59	ST	W16X31	6.00	0.277
60	ST	W16X31	6.00	0.277
61	ST	W16X31	6.00	0.277
62	ST	W16X31	2.00	0.092
63	ST	W16X31	2.00	0.092
64	ST	W16X31	2.00	0.092
65	ST	W16X31	2.00	0.092
66	ST	W16X31	2.00	0.092
67	ST	W16X31	2.00	0.092
68	ST	W16X36	2.00	0.107
69	ST	W16X36	2.00	0.107
70	ST	W14X30	6.00	0.268
71	ST	W14X30	6.00	0.268
72	ST	W14X30	6.00	0.268
73	ST	W14X30	6.00	0.268
74	ST	W14X30	6.00	0.268
75	ST	W14X30	6.00	0.268
76	ST	W16X31	2.00	0.092
77	ST	W16X31	2.00	0.092
78	ST	W16X31	2.00	0.092
79	ST	W16X31	2.00	0.092
80	ST	W16X31	2.00	0.092
81	ST	W16X31	2.00	0.092
82	ST	W16X36	2.00	0.107
83	ST	W16X36	2.00	0.107
84	ST	W14X30	6.00	0.268
85	ST	W14X30	6.00	0.268
86	ST	W14X30	6.00	0.268
87	ST	W14X30	6.00	0.268
88	ST	W16X36	2.00	0.107
89	ST	W16X36	2.00	0.107
90	ST	W16X36	2.00	0.107
93	ST	W21X68	2.00	0.202
94	ST	W21X68	2.00	0.202

STAAD SPACE

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95	ST	W21X68	2.00	0.202
96	ST	W21X68	2.00	0.202
97	ST	W21X68	2.00	0.202
98	ST	W14X30	6.00	0.268
99	ST	W14X30	6.00	0.268
100	ST	W14X30	6.00	0.268
101	ST	W14X30	6.00	0.268
102	ST	W14X30	6.00	0.268
103	ST	W21X68	2.00	0.202
104	ST	W21X68	2.00	0.202
105	ST	W21X68	2.00	0.202
106	ST	W21X68	2.00	0.202
107	ST	W21X68	2.00	0.202
108	ST	W14X30	6.00	0.268
109	ST	W14X30	6.00	0.268
110	ST	W14X30	6.00	0.268
111	ST	W14X30	6.00	0.268
112	ST	W14X30	6.00	0.268
113	ST	W21X68	2.00	0.202
114	ST	W21X68	2.00	0.202
115	ST	W21X68	2.00	0.202
116	ST	W21X68	2.00	0.202
117	ST	W21X68	2.00	0.202
118	ST	W14X30	6.00	0.268
119	ST	W14X30	6.00	0.268
120	ST	W14X30	6.00	0.268
121	ST	W14X30	6.00	0.268
122	ST	W14X30	6.00	0.268
123	ST	W16X36	2.00	0.107
124	ST	W16X36	2.00	0.107
125	ST	W16X36	2.00	0.107
126	ST	W16X36	2.00	0.107
127	ST	W16X36	2.00	0.107
128	ST	W14X30	6.00	0.268
129	ST	W14X30	6.00	0.268
130	ST	W14X30	6.00	0.268
131	ST	W14X30	6.00	0.268
132	ST	W14X30	6.00	0.268
135	ST	W16X31	1.00	0.046
136	ST	W16X31	0.50	0.023
137	ST	W14X30	4.50	0.201
138	ST	W14X30	6.00	0.268
139	ST	W16X36	2.00	0.107
140	ST	W16X36	2.00	0.107
141	ST	W14X30	6.00	0.268
142	ST	W14X30	6.00	0.268
143	ST	W16X36	2.00	0.107
144	ST	W16X36	2.00	0.107
145	ST	W14X30	6.00	0.268
146	ST	W14X30	6.00	0.268
147	ST	W16X36	2.00	0.107
148	ST	W16X36	2.00	0.107
149	ST	W14X30	6.00	0.268
150	ST	W14X30	6.00	0.268
211	ST	W16X31	1.50	0.069
212	ST	W16X31	1.50	0.069

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213	ST	W16X31	1.50	0.069
214	ST	W16X31	1.00	0.046
215	ST	W16X36	2.00	0.107
216	ST	W16X36	2.00	0.107
217	ST	W16X31	1.50	0.069
218	ST	W14X30	1.50	0.067
219	ST	W14X30	1.50	0.067
220	ST	W14X30	1.50	0.067
221	ST	W16X31	0.50	0.023
222	ST	W14X30	1.50	0.067

-----  
TOTAL = 37.030

\*\*\*\*\* END OF DATA FROM INTERNAL STORAGE \*\*\*\*\*

277. \*PARAMETER 3  
278. \*CODE LRFD  
279. \*LZ 6 MEMB 32 135 136 212 214 221  
280. \*PRINT DIA CR  
281. FINISH

\*\*\*\*\* END OF THE STAAD.Pro RUN \*\*\*\*\*

\*\*\*\* DATE= JAN 10,2018 TIME= 13:11: 5 \*\*\*\*

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*****  
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*                                                         *  
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