

Company Info	Project Info
R. C. E.	Project: Foundation Project
3060 Thorntree; Suite 10	Location: 100 Enterprise Way
Chico, CA, 95973	Mytown, CA 10101
Phone: (530) 894-8833	Client: Golden Nugget Casino
Fax: (530) 894-8882	Job No.: Job 2002
E-mail: cj@r-c-e.com	Footing Id: F1 Square Footing With Point Loads

Square footing with simple point loads.

FOUNDATION PARAMETERS

Concrete Ultimate Compressive Strength, f'c.....	2.00 ksi
Concrete Type.....	HardRock
Concrete Cover.....	3.0 in.
Steel Ultimate Strength, Fy.....	40.0 ksi
Column Size.....	6.00 in. by 6.00 in.
Initial Allowable Soil Bearing Strength.....	1.000 ksf
Wind Load Soil Bearing Strength, (1.33 increase).....	1.330 ksf
Seismic Load Soil Bearing Strength, (1.33 increase).....	1.330 ksf
Footing Width.....	4.25 ft.
Footing Length.....	4.25 ft.
Footing Depth.....	12.00 in.
Punching Shear Stress.....	50.69 psi
Beam Shear Stress.....	16.23 psi
Reinforcing Standards per.....	ASTM-A615
Longitudinal Bottom Reinforcement Required for Strength.....	.41 in² (3-#4)
Transverse Bottom Reinforcement Required for Strength.....	.43 in² (3-#4)
Gravity Only Soil Bearing.....	.968 ksf
Wind Load Soil Bearing.....	1.162 ksf
Seismic Load Soil Bearing.....	1.272 ksf

LOADING PARAMETERS - FACTORED LOAD CASES CONSIDERED:

1.4DL	1.4DL + 1.7LL	1.4DL + 1.7LL + 1.7SL
1.05DL + 1.275LL + 1.275WL	0.9DL + 1.3WL	1.05DL + 1.275LL + 1.0EQ
0.9DL + 1.0EQ		

UNFACTORED LOADS:

Load Case	FY, (kips)	MX, (ft-kips)	MZ, (ft-kips)
Dead Load	7.50	0.00	0.00
Live Load	8.90	0.00	0.00
Wind Load	3.50	0.00	0.00
Earthquake	5.50	0.00	0.00
Other Loads	0.00	0.00	0.00

