

Company Info

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Project Info

Project: Foundation Project
 Location: 100 Enterprise Way
 Mytown, CA 10101
 Client: Golden Nugget Casino
 Job No.: Job 2002
 Footing Id: **F4 Rectangular Footing**

Rectangular Footing with moments that place the eccentricity at or beyond the middle 1/3 of the foot

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.
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.....	12.00 ft.
Footing Length.....	19.50 ft.
Footing Depth.....	24.00 in.
Punching Shear Stress.....	120.98 psi
Beam Shear Stress.....	11.88 psi
Reinforcing Standards per.....	ASTM-A615
Longitudinal Bottom Reinforcement Required for Strength.....	3.01 in² (16-#4)
Transverse Bottom Reinforcement Required Inside Column Strip.....	1.00 in² (5-#4)
Transverse Bottom Reinforcement Required Outside Column Strip.....	.31 in² (2-#4)
Gravity Only Soil Bearing.....	.298 ksf
Wind Load Soil Bearing.....	.724 ksf
Seismic Load Soil Bearing.....	.728 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	12.00	0.00	0.00
Live Load	15.00	0.00	0.00
Wind Load	8.00	0.00	250.00
Earthquake	9.00	0.00	250.00
Other Loads	0.00	0.00	0.00

X-eccentricity = 18.00 in.

Y-eccentricity = 2.00 in.

