

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 1)

File: C:\IE REGIDOR\MOD1.rcb

Engineer: Name

4:50:27 p. m. 26/06/2025

REDUNDANCY ANALYSIS

STORY-STRENGTH REDUCTION DUE TO REMOVAL OF CRITICAL ELEMENT

Story	E A R T H Q U A K E - X				E A R T H Q U A K E - Y			
	Vi	Vi/Vb	Crit.Element	Ve/Vi	Vi	Vi/Vb	Crit.Element	Ve/Vi
1	43.3	1.00	BEM:H(33-34)	0.08	41.9	1.00	BEM:34(LI-K)	0.12
MAXIMA				0.08				0.12

NOTE: Shear values are divided by R

Removal of any critial element on any story supporting more than 35% Vb (Base Shear) would not reduce the story strength by more than 33%. Thus SEISMIC FORCE-RESISTING SYSTEM SEEMS REDUNDANT!!
It should be investigated if removal of critical element would induce Extreme Torsional Irregularity (1bP)

Proposed Reduction Factor for Lack of Redundancy: Ørx = 1 Øry = 1