DEPARTMENT OF CIVIL ENGINEERING AND GEOLOGICAL SCIENCES
UNIVERSITY OF NOTRE DAME

Spring 2010 Seminar Series

CHALLENGES AND INNOVATION IN CIVIL AND ENVIRONMENTAL ENGINEERING

Important Design Considerations for a Modern Office Tower

Robert J. McNamara, P.E., S.E.
Founding Principal, McNamara/Salvia Inc. Consulting Engineers, Boston

February 3, 2010
129 DeBartolo Hall
4:30pm

Robert L. McNamara, P.E., S.E., has been practicing structural engineering in the Boston area for over forty years and serves as founding principal of McNamara/ Salvia Inc. He holds a B.S. degree in Architectural Engineering from Pennsylvania State University and a Master of Science from University of California at Berkeley and occasionally teaches at the graduate level at MIT. Mr. McNamara has authored numerous articles pertaining to the behavior of tall buildings. His publications can be accessed in AISC Engineering Journal, ASCE Structural Journal, Earthquake Spectra and other renowned structural and engineering journals.

He is an expert in tall building design, wind and seismic engineering and seismic protection systems, coupling an in-depth understanding of structural dynamics with a thorough knowledge of current seismic standards. He has applied state of the art innovative technologies to the conceptual design of many major projects and has played important roles in high-rise buildings all over the world. Recent designs include a 40-store office tower in Boston utilizing a passive energy dissipating system to control the tower's movement in the wind.

Mr. McNamara will discuss some of the structural criteria program requirements along with the requirements inherent in developing a modern office tower in Boston. Structural considerations such as a integrated mechanical/floor truss design will be discussed. The development of a state of the art passive wind motion mitigation system utilizing viscous dampers (shock absorbers) will be presented along with a discussion of a today's current security needs and blast considerations.

A reception and an opportunity to meet the speaker will take place at 4:00pm in the CE/GEOS office conference room, Fitzpatrick 156, before the seminar