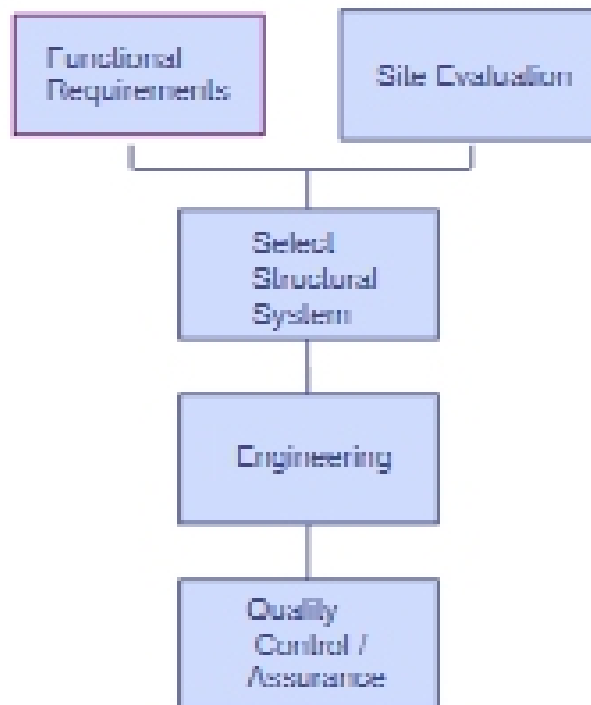


Overview of the Basic Seismic Resistant Design Process

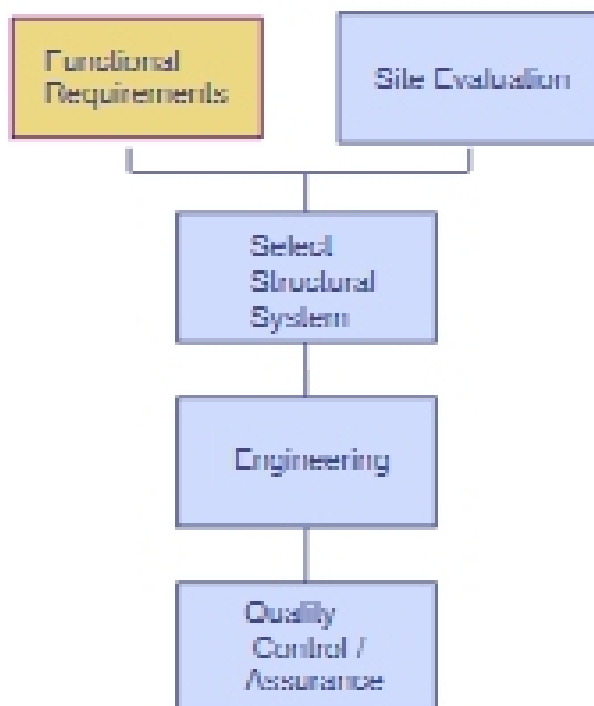
- ❖ A quick look at the overall design process.
- ❖ Then look at some basic reasons for using nonlinear response to help us achieve performance objectives



Basic Steps in the Design Process



Functional /Operational Requirements



- ❖ Loading - Dead, live, etc.
- ❖ Spatial requirements (minimum area, height limits, interior open space, etc.)
- ❖ Operating restrictions (deflection, settlement, vibration limits)
- ❖ Expected life of structure
- ❖ Time available for construction
- ❖ Local cost of materials/labor
- ❖ Value of money
- ❖ Assess owner's aversion to risk
- ❖ Establish performance levels and key response parameters for frequent, rare and very rare seismic events and wind storms.

