Liam McNamara BAE/MAE 5<sup>th</sup> Year Advisor Dr. Lepage Thesis, Spring 2010

## Outline (3 screen presentation)

- 1. Introduction (2 slides)
  - a. Myself
  - b. 300 North LaSalle
    - Design Team
    - Construction Dates
    - Height, sq.ftg, and cost
- 2. Existing Structure (4 slides)
  - a. Foundation
  - b. Gravity
  - c. Lateral System
    - Core
    - Trusses
- 3. Goals (1 slide)
- 4. Lateral Redesign (8-10 slides)
  - a. Things to consider (1 slide)
    - Symmetry, drift, acceleration, impact on architecture, etc.
  - b. 1<sup>st</sup> Iteration (2 slides)
    - Goal, Configuration, Results
    - Analysis per checklist of things to consider
  - c. 2<sup>nd</sup> Iteration (2 slides)
    - Goals, Configuration, Results
    - Analysis per checklist of things to consider
  - d. Final Design (4 slides)
    - Goals, Configuration, Results
    - Design of Coupling Beams
    - Design of Pier Reinforcement
    - Analysis per checklist of things to consider
- 5. Architectural Breadth (2-4 slides)
  - a. Impact of new core design
  - b. Re-assignment of vertical circulation
  - c. Transition of HVAC

- d. Floor space gained
- e. Fire Protection
- 6. Acoustical Breadth(1-2 slides)
  - a. Noise Criteria Requirement
  - b. STC of new core wall
  - c. Additional issues
  - d. Construction recommendations
- 7. Final Conclusion (1 slide)
- 8. Questions (1 slide)