

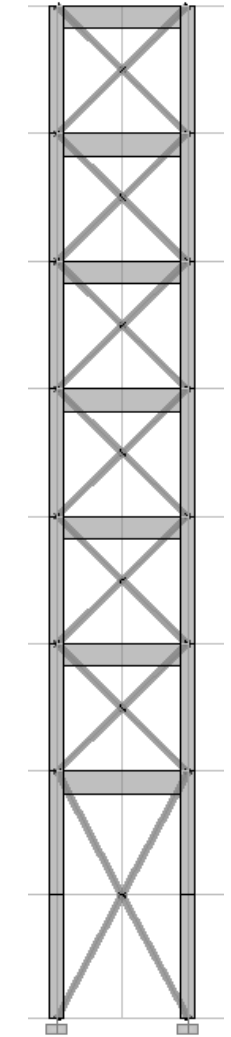
NORTH SHORE DRIVE

Hyatt Place North Shore

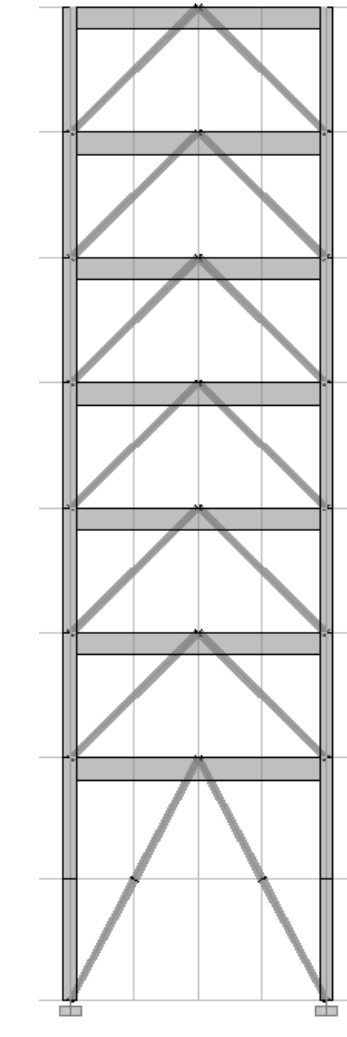
AE Senior Thesis Spring 2011
Kyle Tennant Structural Option
Faculty Consultant ... Dr. Ali Memari



- Project Information
- Existing Structure
- Thesis Proposal**
- Structural Depth
 - Lateral System Design
 - Gravity System Design
- Architectural Breadth
- Cost and Schedule Breadth
- Conclusions



X Brace



Inverted V

Thesis Proposal

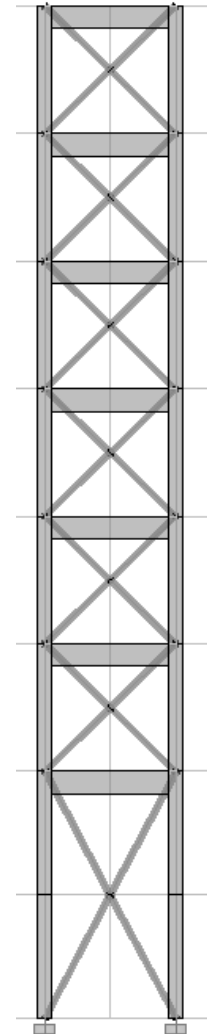
Move To High Seismic Region

Building Shape is Susceptible to Torsion

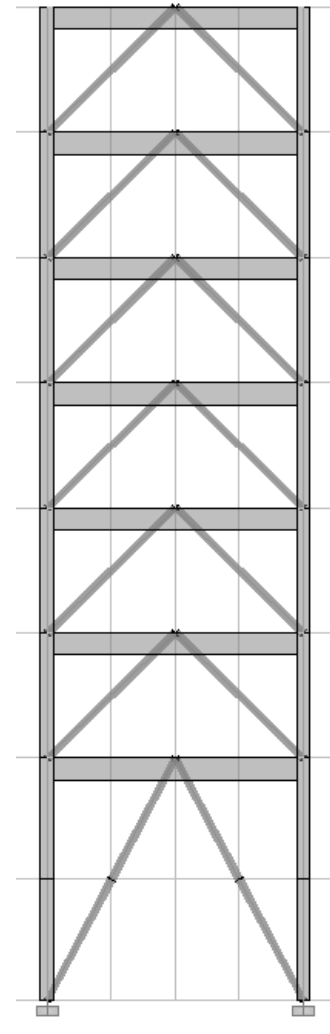
- Split building into two equal wings
- Even distribution of lateral force elements
- Steel Construction
 - Lighter more ductile building
- Braced frame design
 - MAE



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Inverted V

Architectural Breadth

Location of Braced Frames

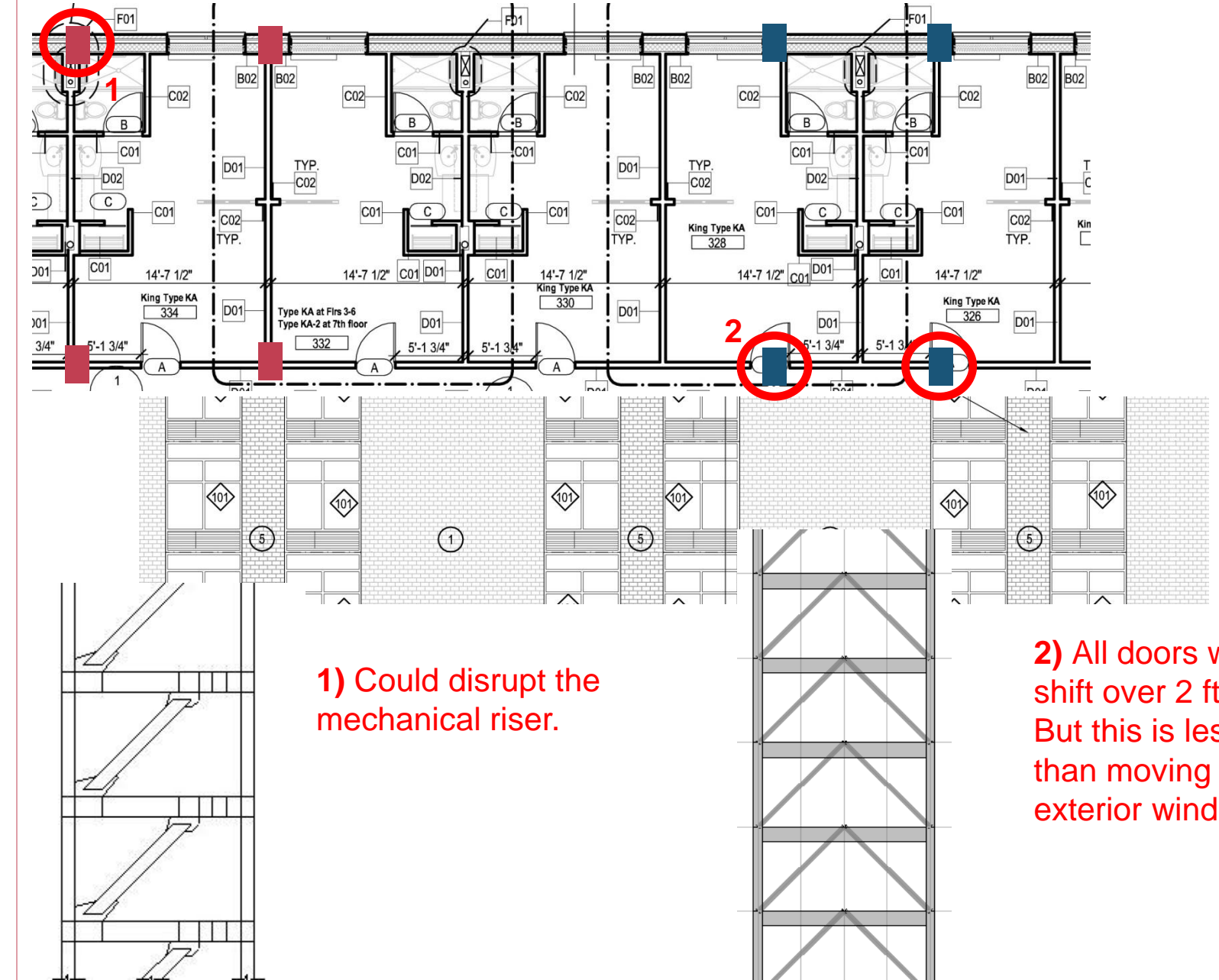
Disturbance to Facade

- Between Openings VS Around Openings

- Leads to more ideal column placement
- Leads to more ideal column placement

Between Openings

- **Inverted V Brace**
- **More efficient and simplistic**



1) Could disrupt the mechanical riser.

2) All doors will have to shift over 2 ft. But this is less disruptive than moving all of the exterior windows