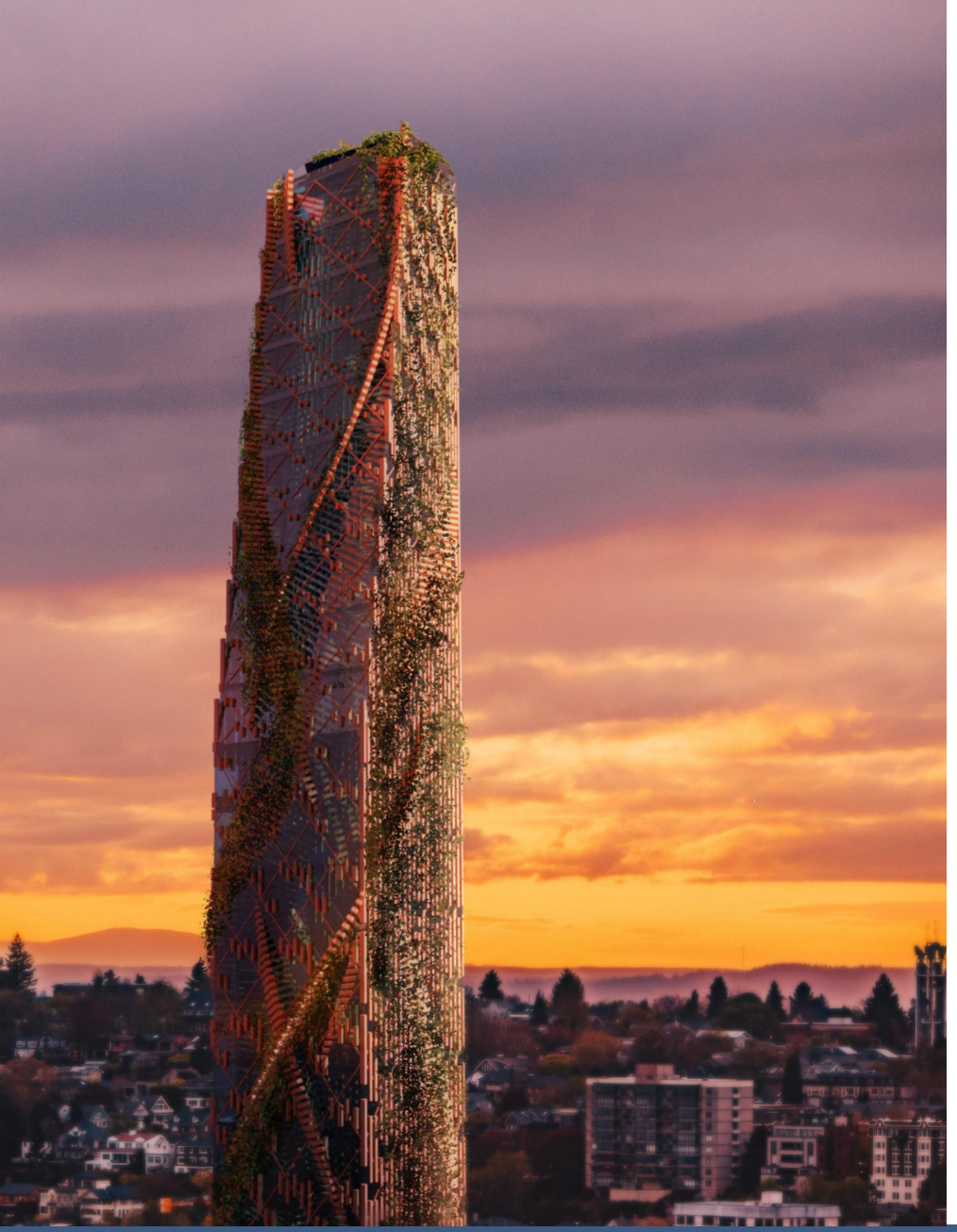
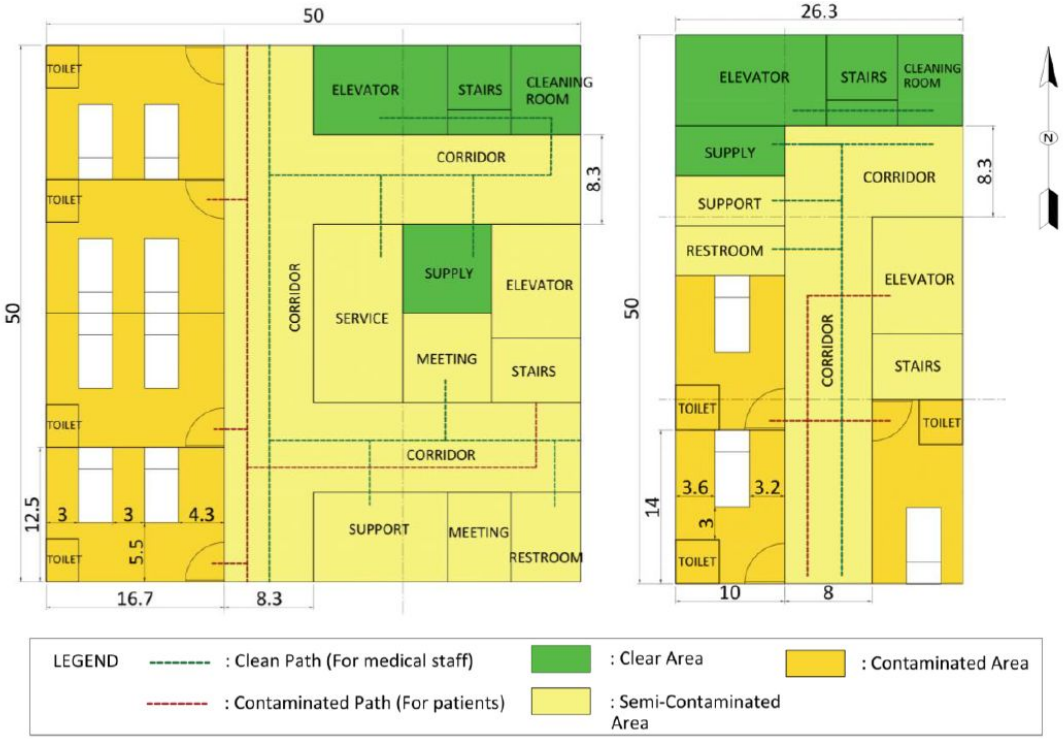
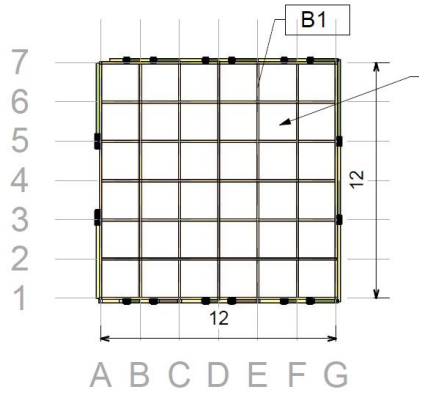


GOLDFINCH HOSPITAL

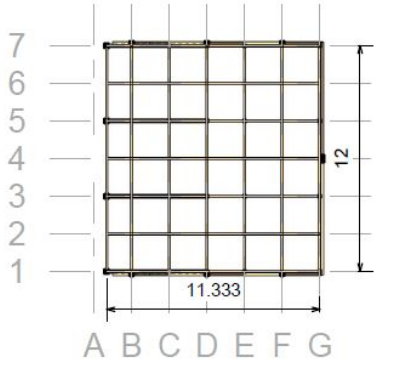
UNIVERSITY OF TORONTO SEISMIC DESIGN TEAM



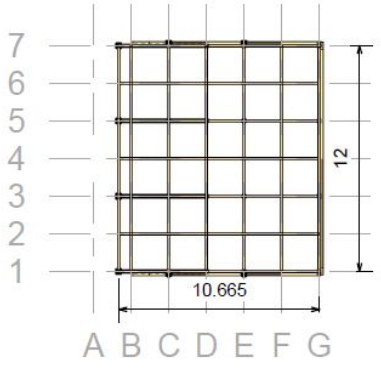
TYPICAL FLOOR PLANS



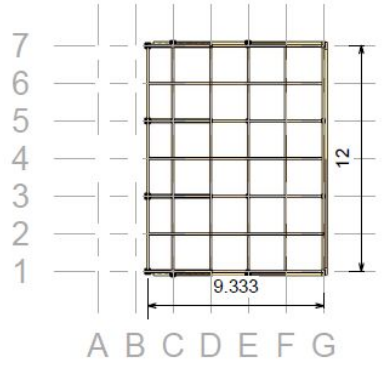
1 LEVEL 11
1 : 7



2 LEVEL 12
1 : 7



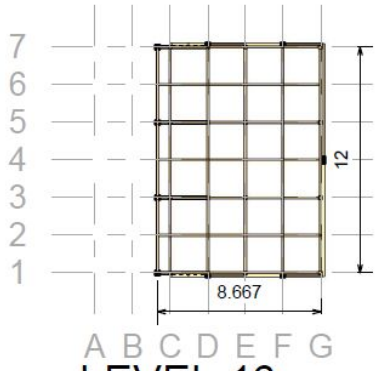
3 LEVEL 13
1 : 7



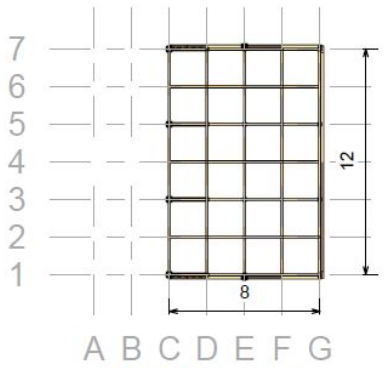
4 LEVEL 15
1 : 7

Total floor area:
2412 in^2

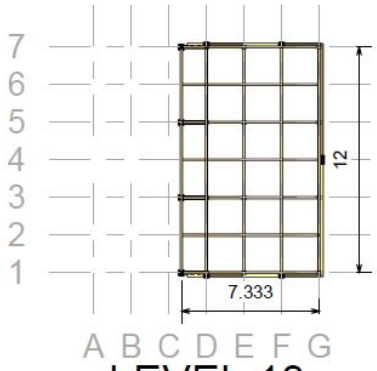
Total weight:
0.436 lb



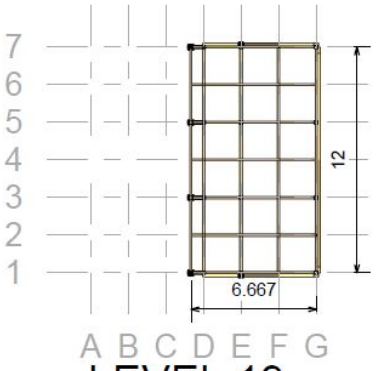
5 LEVEL 16
1 : 7



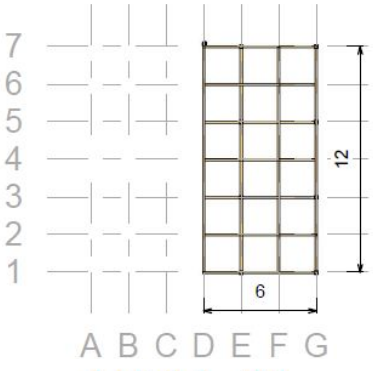
6 LEVEL 17
1 : 7



7 LEVEL 18
1 : 7

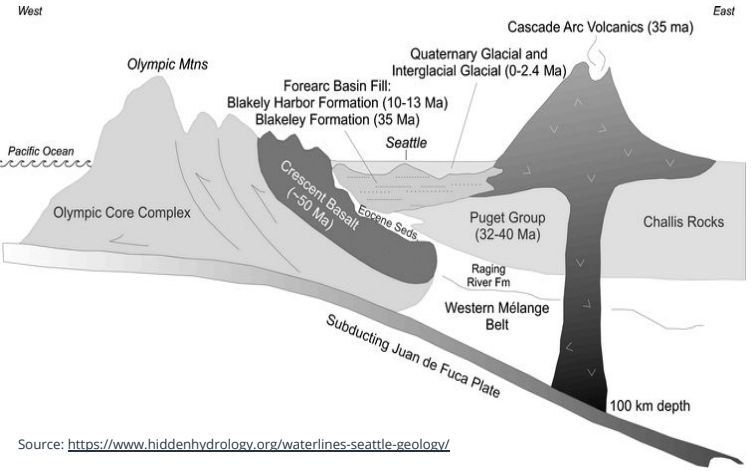


8 LEVEL 19
1 : 7



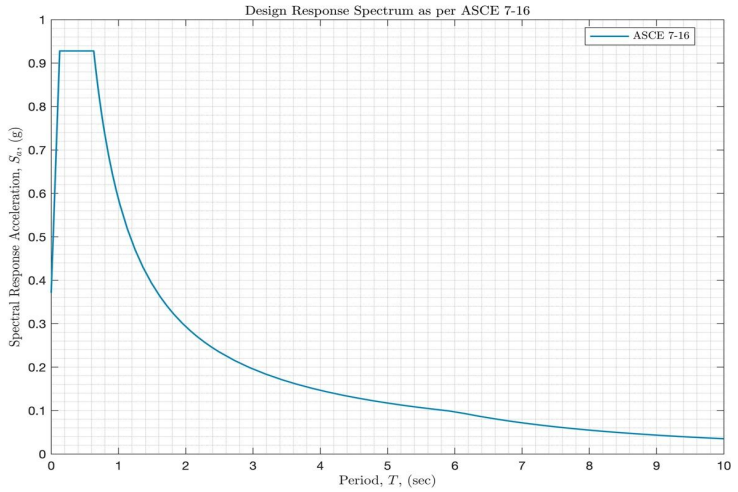
9 LEVEL 20
1 : 7

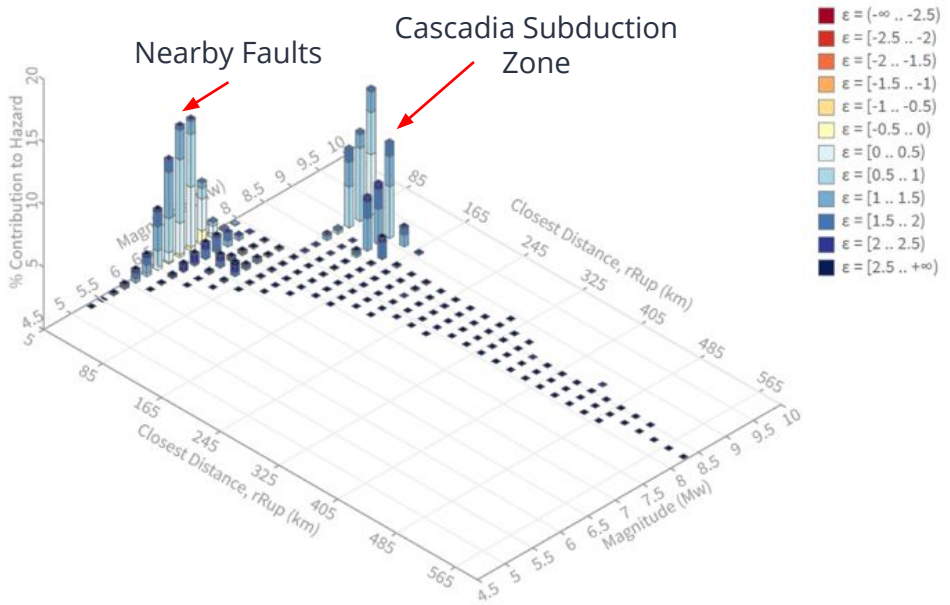
GEOTECH & SEISMICITY



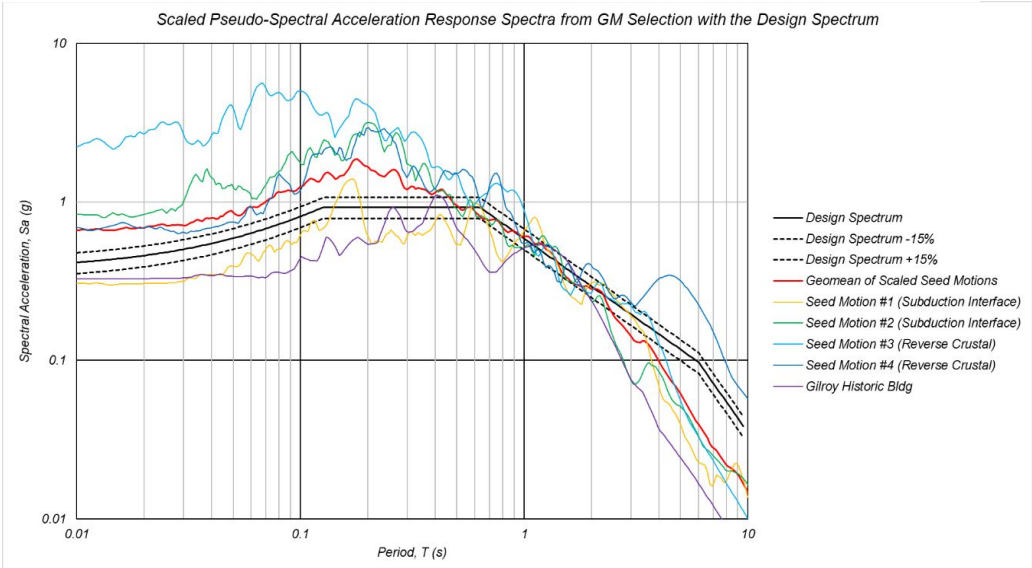
Source: https://www.hiddenhydrology.org/waterlines-seattle-geology/

- Borehole log (~185 ft) available from adjacent site
  - very loose to medium dense gravelly sand to sandy gravel fill overlying very dense/stiff silty sand till, silty sand, sand, silt, and clay
  - Groundwater was encountered at the time of drilling at a depth of 9.5 feet
- **Site Class F** as per ASCE 7-16 (since liquefaction is likely due to loose sandy and silty soils near the ground surface and high groundwater level)
- **Site Class E** (if liquefaction is mitigated, determined from shear wave velocity)
- The risk category of this hospital is "**Risk Category IV**"

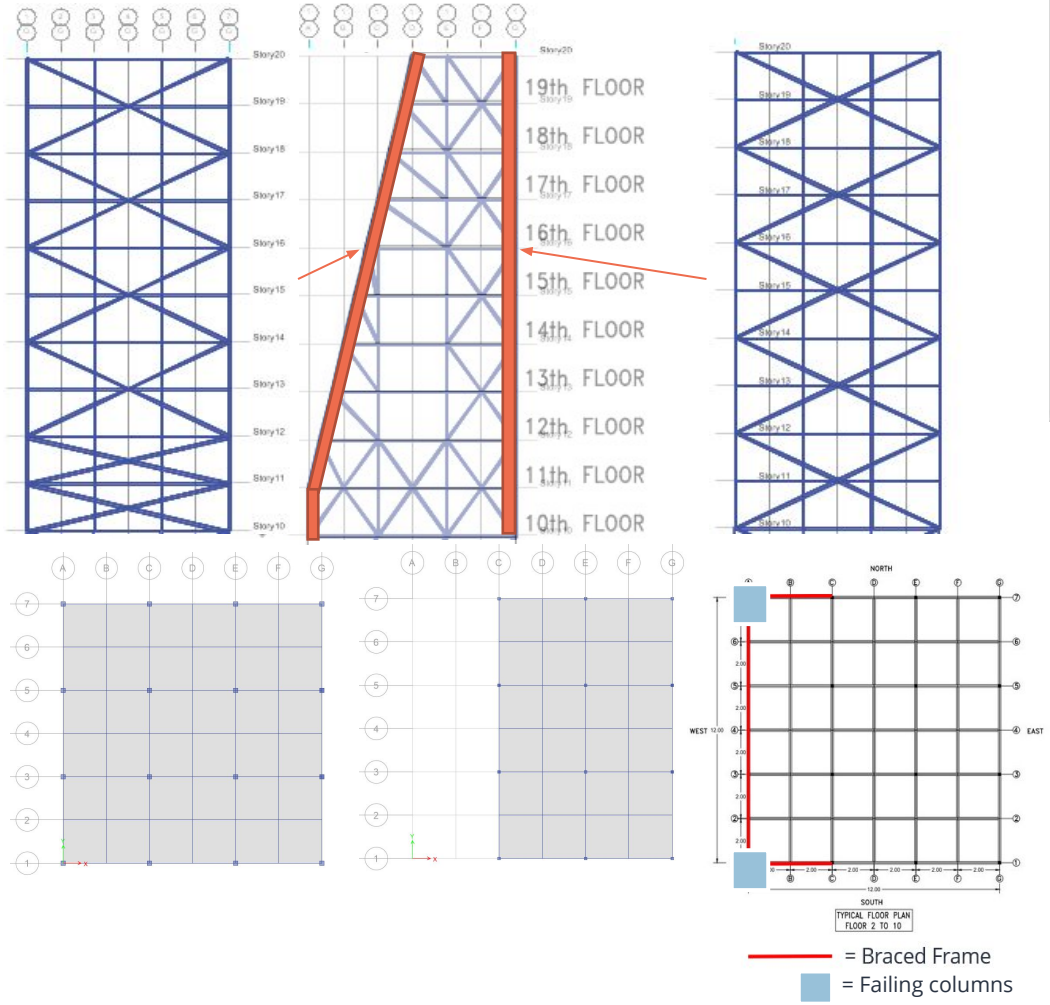




Deaggregation Plot for T = 2.0 seconds

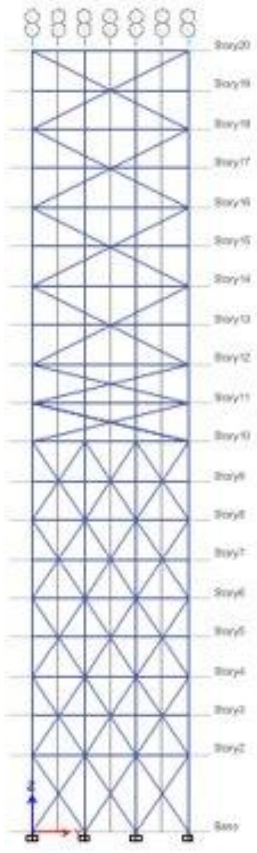


ADDITION

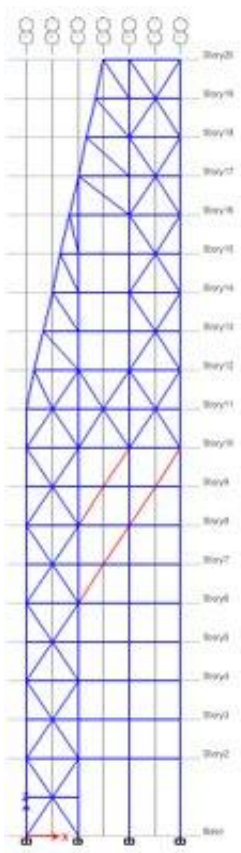


Loading Type	Max D/C Ratio Existing Structure	Max D/C Ratio With Addition	Member Type
Axial Comp.	49%	119%	Column
Axial Tension	24%	58%	Column
Bending Mom.	20%	64%	Beam
Shear	3.7%	8.2%	Beam

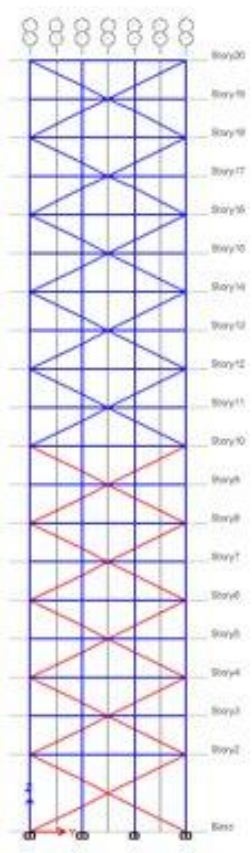
RETROFIT



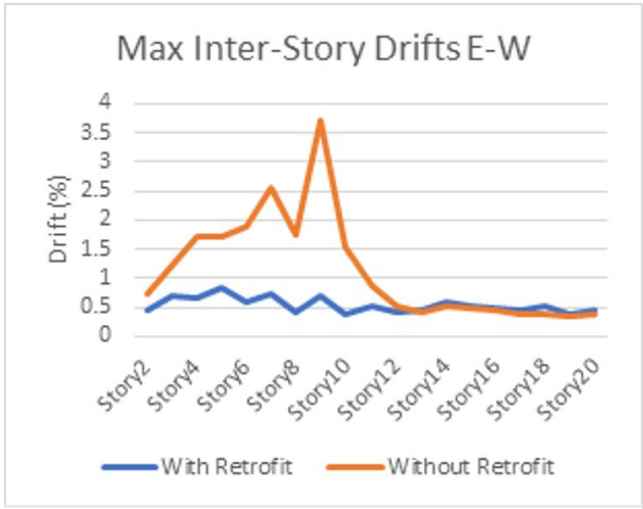
West Face

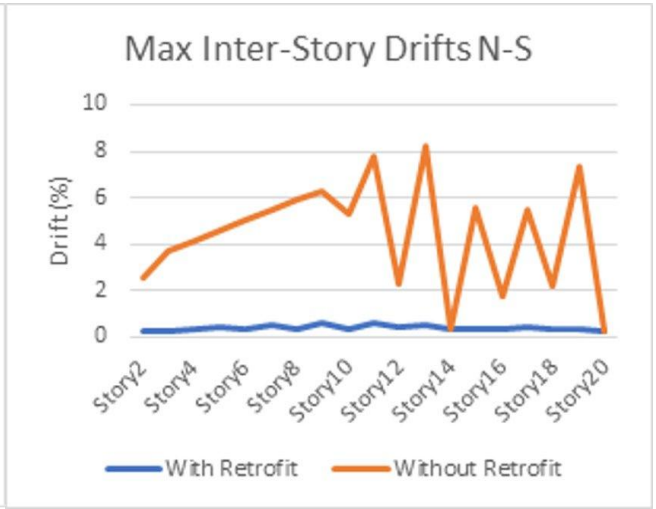


North/South Faces



East Face





Loading Type	Max D/C Ratio Pre-Retrofit	Max D/C Ratio With Retrofit	Member Type
Axial Comp.	119%	**34%**	Column
Axial Tension	58%	15%	Column
Bending Mom.	64%	9.9%	Beam
Shear	8.2%	7.4%	Beam