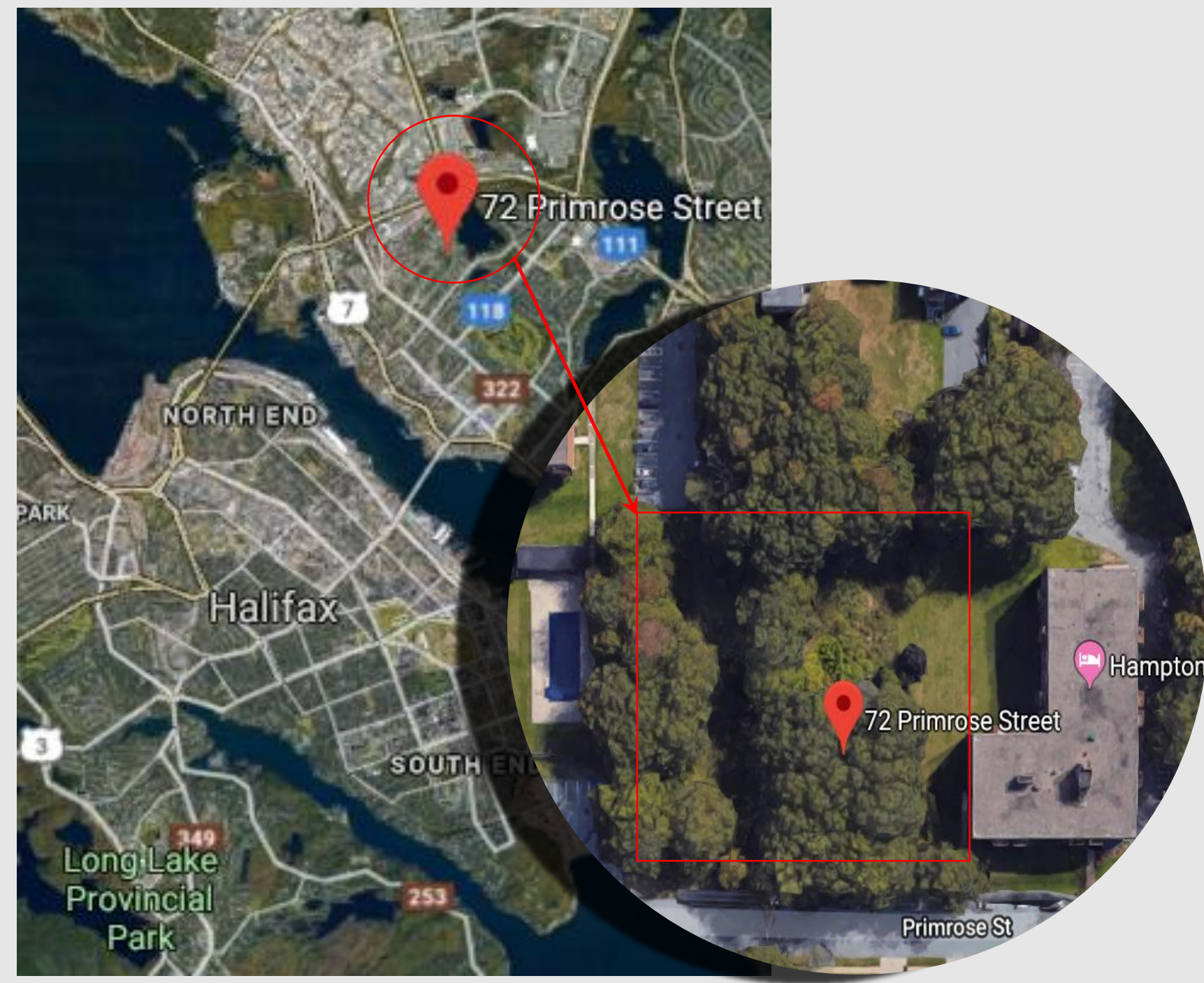


Project Scope



- 6-Storey Mixed-Use Concrete Building
- Located in Highfield Park, Dartmouth near Albro Lake

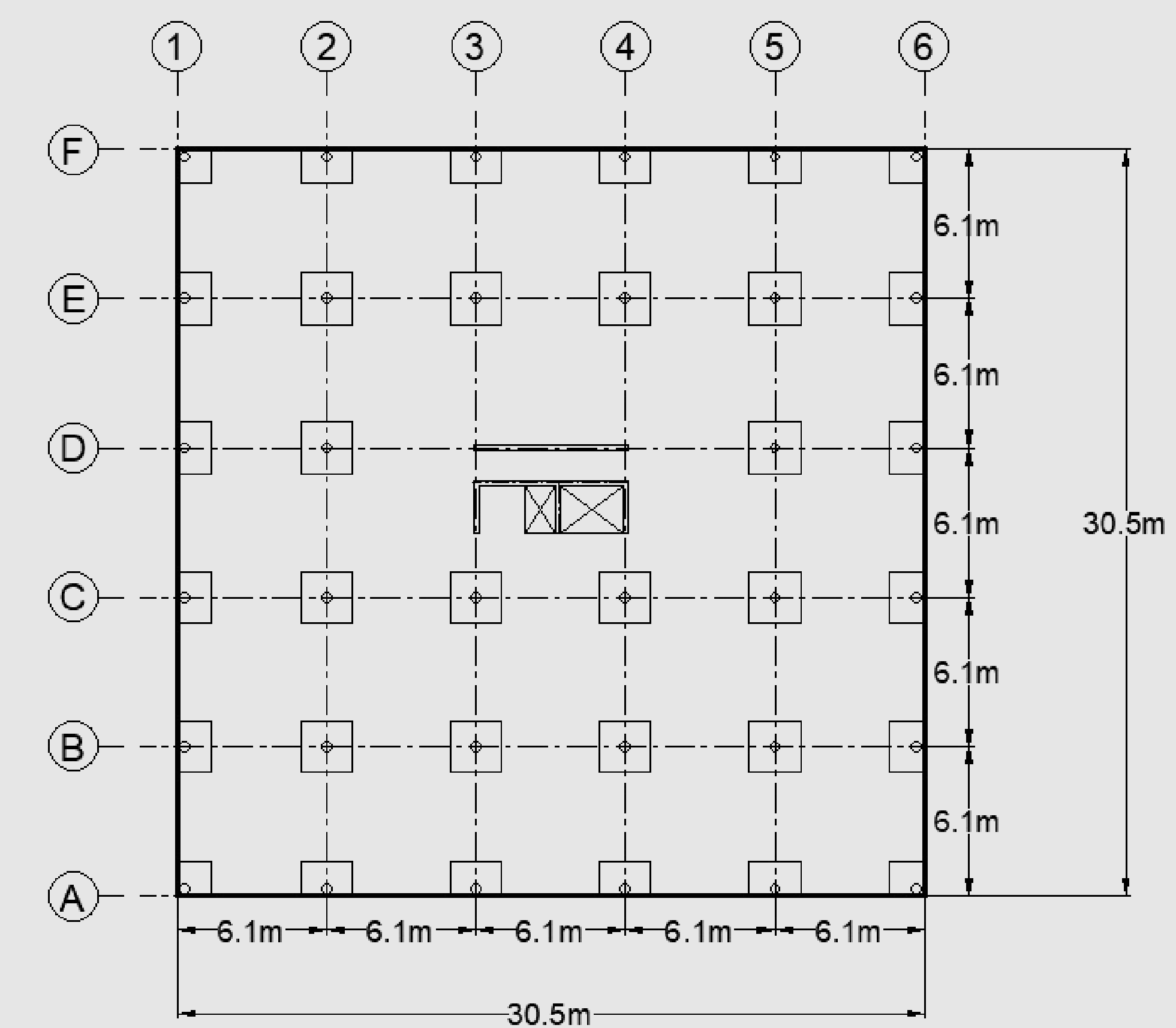
Given:

- Architectural Schematics
- Geotechnical Profile
- Client seeking LEED Certification
- Commercial space on Main Floor

Details of Design

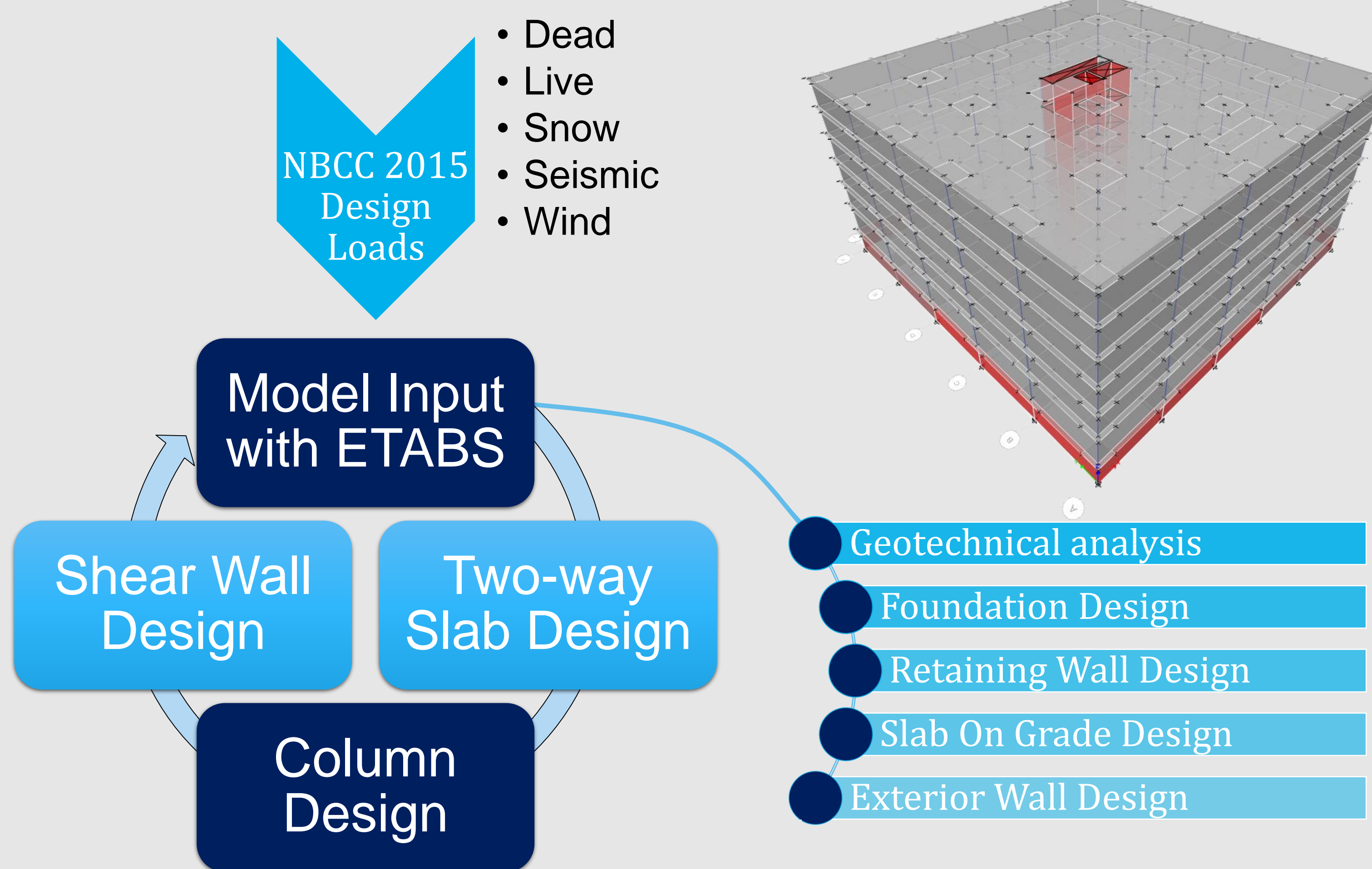


Above: Rendered Image of 72 Primerose St.

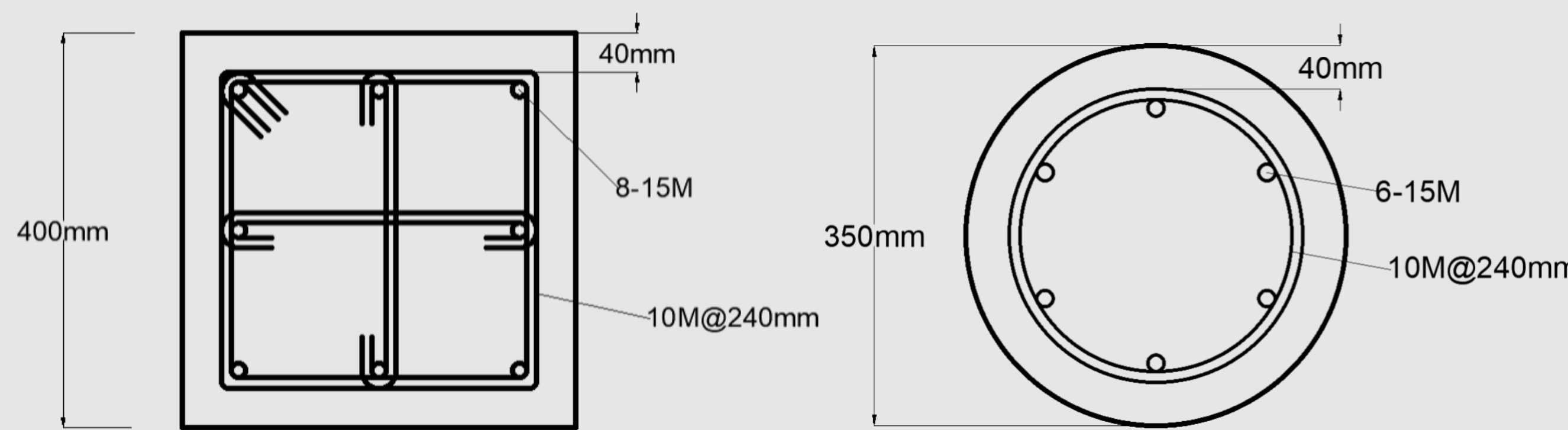


Above: Typical Floor Plan

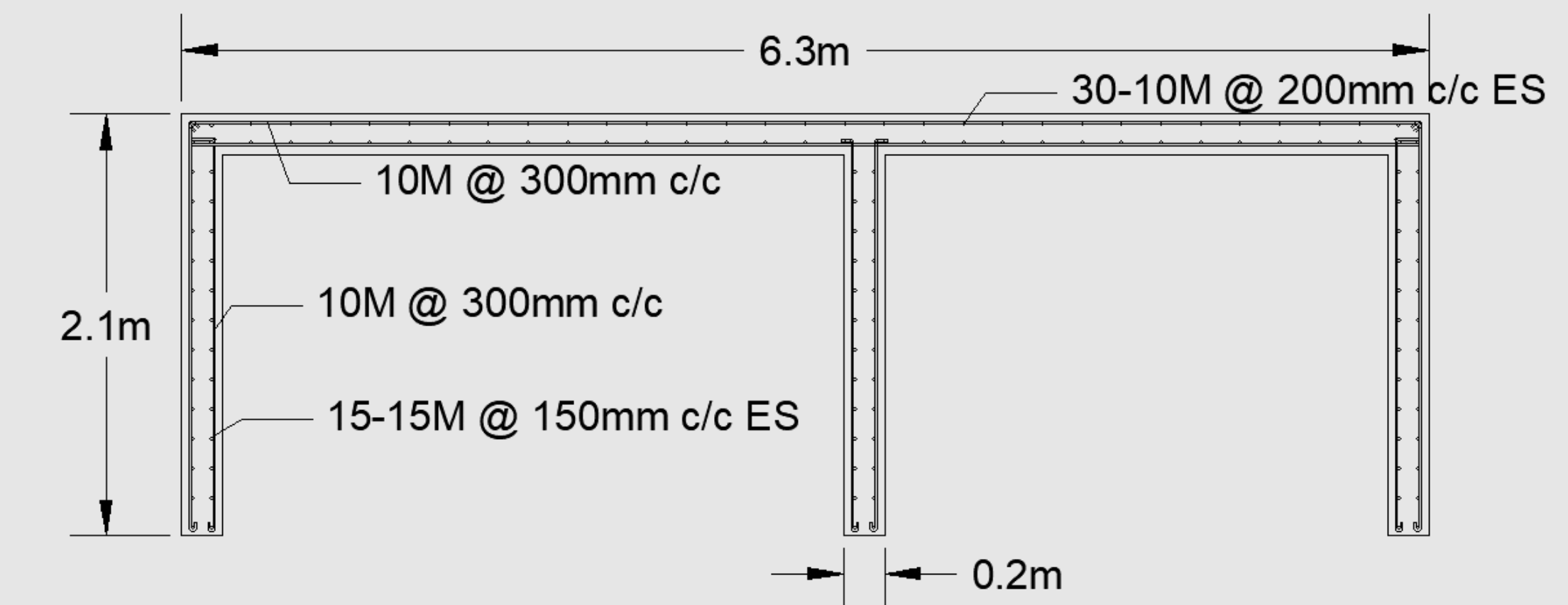
Iterative Design Process



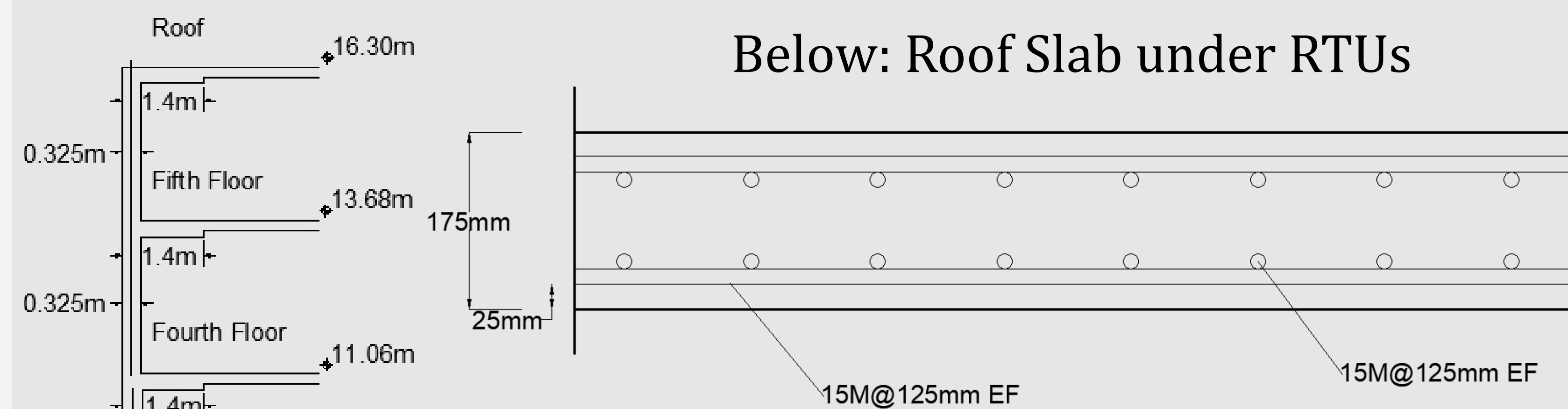
Below: Typical Column Sections (Left: Basement, Right: 4th Floor)



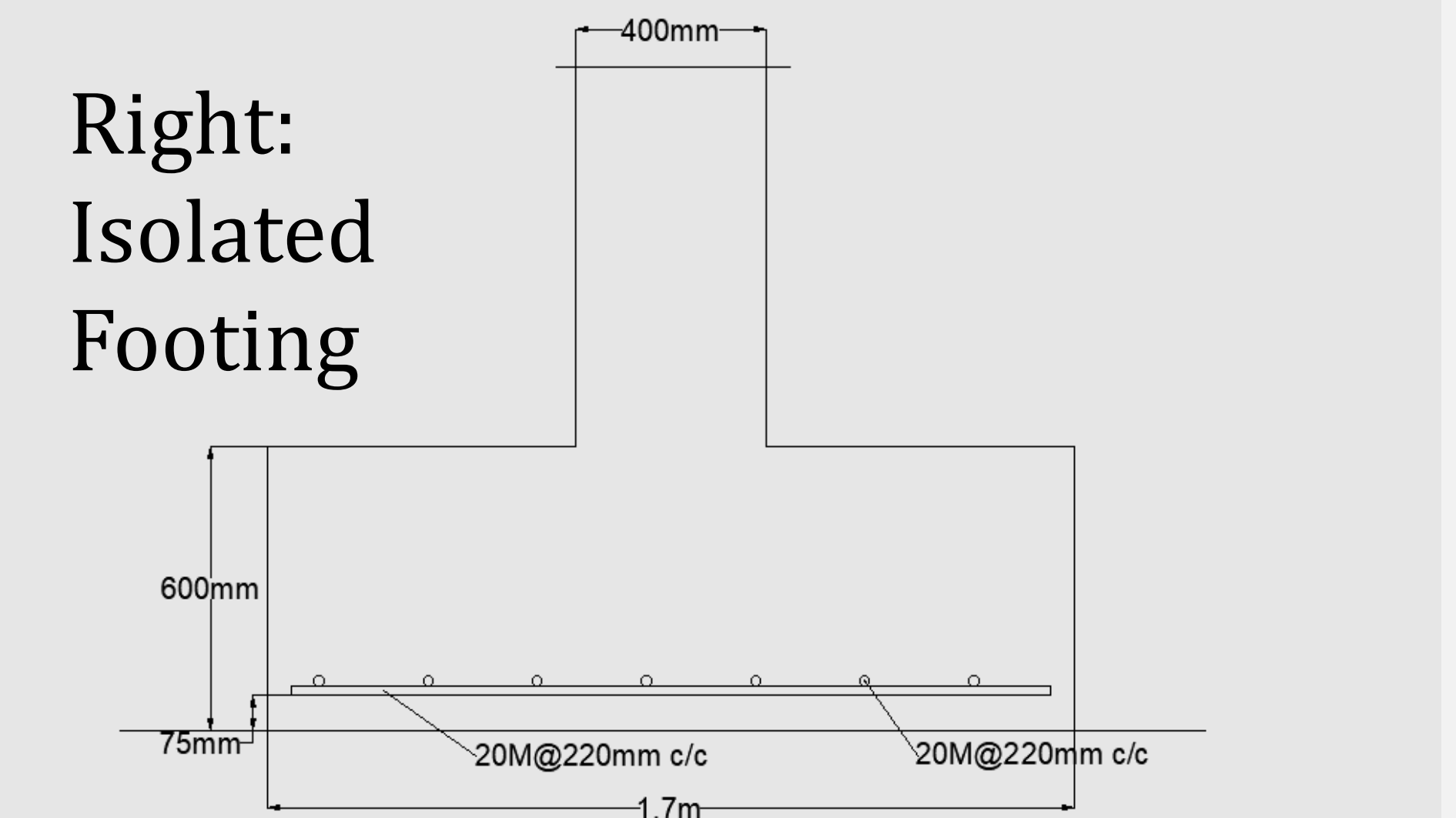
Below: Basement Shear Wall Section



Below: Roof Slab under RTUs



Right: Isolated Footing



Conclusions and Recommendations

- Total Project Price (Class D Estimate) - \$21.5 Million
- Total Construction Duration - 16 Months

LEED Recommendations:

- Rainwater Collection System
- Fly Ash in Concrete Mix
- Energy/Water Saving Appliances
- Indoor/Outdoor Bike Storage

Acknowledgments

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- Dr. Yi Liu
- Dr. Craig Lake
- Dr. Jane Thorburn
- Mr. Reza Rahimi

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- Computers & Structures, Inc. ETABS [Computer Software]. Walnut Creek, CA, USA.
- Google Maps, 2019. 72 Primrose St., Dartmouth NS. Retrieved March 26, 2019.
- National Research Council of Canada, 2015. National Building Code of Canada. NRC

Above: Column Strip Detail

Left: Elevation View

Right: Retaining Wall

