

SEISMIC TESTING OF ANCHORS IN UNREINFORCED MASONRY STRUCTURES

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Project Proposal

- Research the pull-out strength of adhesive anchors used in the seismic retrofit of unreinforced masonry buildings so that future designs can be improved to withstand a higher seismic capacity.
- Collect data from different buildings with different retrofit connections and parapet restraints to summarize them into comprehensive qualitative and quantitative information that other engineers and non-engineers may understand.

Week's Progress

- Finished the analysis of the aftermath photos of buildings that were effected by the 2010/2011 Canterbury Earthquake Swarm
 - ▣ Organized the recorded information into a modified database that can be related to each building
 - ▣ Recorded important parameters, for each building, that could be used to later describe the performance of unreinforced masonry buildings to the Royal Commission
 - ▣ Presented our addendum to the final overall database Excel spreadsheet

- Converted plain several text documents into excel spreadsheets which contained columns that calculated the corresponding forces and displacements that needed to be plotted
 - ▣ Produced force vs. displacement graphs for each test

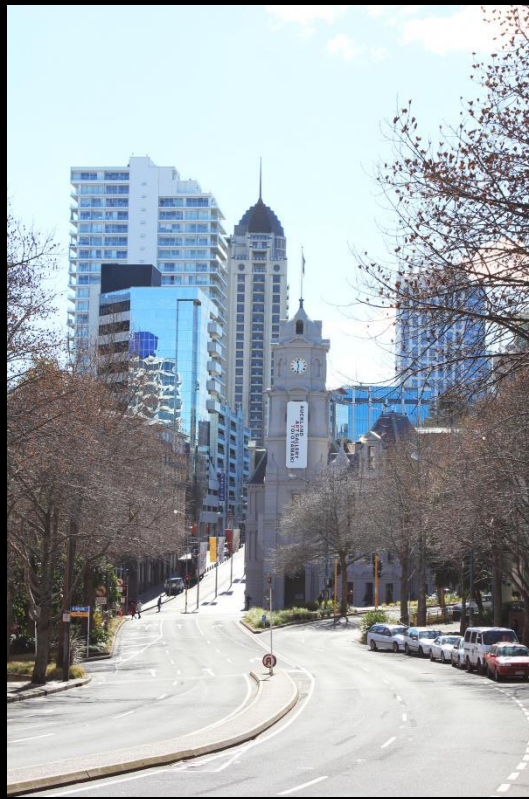
Successes:

- Completed multiple sections of the projects I was working on
 - ▣ The week's work went by smoothly and there were fortunately no road blocks to overcome

Goals

- Create comprehensive graphs that help organize and interpret multiple relationships between level of damage of each building and their various parameters

Right:
Auckland Art
Gallery



Below: Café
in Parnell



Above:
Farmer's
Market in
Britomart



Left:
Exploring
New
Zealand's
oldest
suburb -
Parnell

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