

BREADTH STUDIES PROPOSAL

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STRUCTURAL OPTION
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EXECUTIVE SUMMARY

The proposed thesis breadth work will cover both *structural* and *construction management* areas.

STRUCTURAL

The first study will be a detailed check of the interior column's footing. The footing will be checked in the following categories: allowable soil stress, size of the footing, puncture shear strength, flexural strength, and steel reinforcement.

CONSTRUCTION MANAGEMENT

In the second study, the cost of a similar size concrete building will be estimated using the RSM Means. The cost of existing design will be both estimated using the RSM Means, and also verified by contacting the CM firm. The costs of two systems will be compared under the following categories: cost of material, cost of installation, and the total cost of the building.