

Appendix A

Aside from the critical industry issue and construction management issue, there are two separate breadth options mentioned in this proposal. The first breadth is the third analysis, which is a curtainwall breadth. It takes a close look at the curtainwall's design on the west elevation. Looking into changing the properties of the existing columns is the second analysis, which is a structural breadth. Also included in this appendix is a schedule for the spring semester of 2009.

Curtainwall Breadth

The current design is to slope the curtainwall at a 5.63° angle outward from the bottom of the office floors all the way up to the roof for a portion of the facade. The proposed idea is to straighten out the facade, which would require the structure on the west side of the building to be slightly altered. The curtainwall ties into the concrete slabs of the building's structure. Calculations would be necessary to determine if the slabs could be extended to ultimately straighten out the facade of the west elevation.

Structural Breadth

The building's structure is primarily cast-in-place concrete that is post-tensioned. There are a wide variety of columns within the structure's designs. The columns are currently set as several different shapes including rectangular, square, and circular. They all also have varying concrete compression strength. The idea proposed would be to change all the circular columns to square ones. Doing so would reduce the variety of formwork on the jobsite therefore reducing costs. Calculations would be necessary to confirm that the replacement columns are sufficient to maintain the structure's integrity.

Schedule for Spring 2009

The schedule on the following page is a rough estimate of how the research will be completed. Note that dates are subject to change.