

Chris Shelow Structural Advisor: M. Kevin Parfitt Koshland Integrated Natural Science Center 12/9/05 AE 481W

## **Senior Thesis Proposal**

## Breadth Studies

As part of this thesis study, two breadth studies will be performed. The first study will be an involved investigation of some CM issues. The two primary issues that will be targeted are project cost and construction schedule. These two issues will be compared for both, the existing and alternative system. The cost estimate will be influenced by factors such as construction schedule, material availability, as well as project deadline.

The second breadth study that will be performed is an investigation of the architecture of the alternate design. The use of steel as opposed to precast concrete may affect the layout of the structural elements. Should this be the case, the architecture of the KINSC could be altered. Another reason that the architecture of the building will be studied is the fact the existing adjoining buildings, Sharpless and Hilles Halls, have been constructed out of concrete. The current architecture of the KINSC coincides with the architecture of the two Halls. Therefore, with the alternate system changing the KINSC to a steel building directly adjoined to two concrete buildings with similar architecture, the architecture of the KINSC will need to somehow comply with the other two buildings.

