

# Depth and Breadth Design Proposal

## Executive Summary

The Depth and Breadth Design Proposal describes the redesign of the Holy Cross Hospital – North Addition. Both the electrical and lighting redesign and two breadth topics are discussed and a tentative progress schedule is laid out. The depth of my thesis will be the electrical and lighting disciplines. I will be investigating the emergency electrical system of the hospital by redesigning the distribution method of the emergency system and comparing the redesigns to the existing distribution system. From this investigation, I will determine the positive/negative impacts that the alternative distribution systems present to the redesign and whether or not these alternatives are a feasible substitute. In addition, I will be redesigning two lighting spaces in accordance with the recommendations and guidelines in the IESNA Lighting Handbook, the ASHRAE 90.1 power density criteria, and the design concepts suggested in my Lighting Design Proposal. The two spaces to be redesigned are the main entrance lobby and the registration area. For my two breadth studies, I will be investigating the possible impact on the mechanical loads related to the two electrical distribution redesigns explained above and a detailed cost estimate/comparison of one of the electrical redesign alternatives to the existing distribution system.

