

Executive Summary

The purpose of this proposal is to provide an overview of the three topics that will be researched for my final thesis report on the City Hospital, Pennsylvania project. The City Hospital Phase I is an "L" shaped four-story composite building structure below grade which will provide a research facility, an administrative space, a conference space, and a Central Utility Plant (C.U.P.) which houses the main MEP systems. City Hospital is seeking LEED® Silver Certification for New Construction. To achieve a silver LEED® certification the project intends to earn 35 points. My research will include alternative methods to the systems used in Phase I.

The first research topic is an issue that relates to the construction industry as discussed in the PACE Roundtable. This topic will identify the issue of Building Information Modeling- 4D modeling on the City Hospital project. The next two topics; effects of voltage on the generators and LEED® Gold Certification execution are technical analyses that will also be breadth analyses for my proposal as shown in the weight matrix. The alternative methods chosen will be analyzed using different investigation areas such as constructability review, value engineering analysis, and schedule reduction.

This report contains information about the critical issues facing the construction industry; these issues also face the City Hospital project. Also contained in this report are two breadth analyses which include an analysis that will address the problems on the project, a proposed solution with theoretical benefits, research timetable, and a weight matrix that will illustrate the analyses and core areas of investigation.