

## Executive Summary

Throughout the 2012/2013 academic calendar year, the Fisk Corporate Headquarters project was studied and analyzed to target project challenges and propose alternative means and methods as solutions to those challenges. After careful investigation of the project, three major areas were targeted for improvement; the project's sequencing and schedule, the costly electrical distribution system, and the lack of LEED Building Certification. This report details the challenges associated with these areas, suggests solutions, and analyzes the solutions' implementation in the Fisk Corporate Headquarters project. While these areas were perceived as having opportunities for improvement, the purpose of this report is not to critique the project team. Rather, this report seeks to study their already efficient project plan for educational purposes.

### *Analysis #1: Project Sequencing Improvement*

The first analysis attempted to reduce the overall project schedule duration by altering the original activity sequence. Because of Fisk Electric's unique relationship with the general contractor, Fisk decided to carry the cost of general conditions themselves. As such, any reduction in the overall project schedule duration would result in direct savings for Fisk.

The proposed schedule re-sequencing in this report shortened the project's construction schedule by 4 weeks, without hindering any worker productivity. The total owner savings due to the reduction of the schedule amounts to over \$50,000.

### *Analysis #2: Detailed Analysis of Electrical System Redesign*

The second analysis involved a redesign of the Fisk Corporate Headquarters' electrical distribution system in an attempt to reduce the system's construction costs by eliminating the number of distribution components while still maintaining the integrity of the original system's design intent. This redesign resulted in a cost savings of \$11,669 and a schedule savings of just less than 4.5 days.

### *Analysis #3: Implementation of LEED*

The final major analysis sought to determine whether Fisk Electric should have applied for a LEED Building Certification on their new facility. Because the building's systems were already designed with LEED principles in place, the only additional costs required to achieve a LEED rating were construction based ones. These minor costs totaled \$28,266. This report also designed a series of architectural overhangs that, if implemented, would result in an increase in the building's energy efficiency and allowing a potential LEED Silver rating.

In conclusion, it is recommended that all three of the proposed analyses be adopted by the project team on the Fisk Corporate Headquarters job. The cost savings from the first two analyses totaled \$62,267. If the Fisk Electric ownership team elected to apply for a LEED rating it would cost them \$28,266. When subtracted from the first two analyses savings, it would result in a total project savings of \$34,101 while being able to boast a LEED building certification. Along with the total cost savings, the overall project schedule would be reduced by over 4 weeks if Fisk chose to implement the strategies outlined in this report. They also would be aided by the many business benefits associated with owning and maintaining a LEED facility.