



Executive Summary

This proposal is comprised of the Outpatient Medical Center general building information and three analysis areas that I will be using for my research next semester. The three analysis ideas for my research and analytical development improve; cost, constructability, and schedule reduction/acceleration and they are as followed:

Analysis 1: Structural System

This analysis focuses on the changing the structural system from cast in place concrete to structural steel. This analysis will illustrate the effects the steel structure has on the cost and schedule for the project. With this analysis is a breadth study of the re-designing of the structural system and re-design the mechanical, electrical, and plumbing systems if needed.

Breadth Study 1:

This analysis will include a structural breadth study by redesigning the structural system and examination the impacts it has on the mechanical, electrical, and plumbing system. Impacts of the mechanical, electrical, and plumbing system may result in redesigning sections of the systems and could illustrate new areas of coordination due to clashes in systems.

Analysis 2: Mechanical System

This analysis looks that adding a heat recovery system to the mechanical system to improve the air quality and to reduce energy cost. This analysis will look at the cost effects add from adding this in the system and the overall cost effects of utilizing it. This Analysis has a breadth study of the mechanical system and the effects of adding a heat recovery system.



Breadth Study 2:

This analysis will include a breadth study of the mechanical system and the impacts of adding heat recovery system into the building. A redesign of the mechanical system will include the sizing of the heat recovery system and the mechanical system if needed. The redesign will also include impacts and placement of all the proper equipment needed to be installed and utilized in the building. This breadth study will illustrate the cost impacts a heat recovery system has on the project cost.

Analysis 3: Building Information Modeling (Critical Issues Research)

This analysis includes the research ideas for understanding the construction industries challenges with implementing and utilizing building information modeling. How does impact the project and what does it take to implement it on the construction project.