



Robert M. Leicht
Construction Management Option
Advisor: Dr. John Messner
Bldg: Smithsonian Institution
Patent Office building
Washington, DC
10/4/04
Technical Assignment 1

Executive Summary:

The Smithsonian Institution Patent Office Building is a very unique project. Located in downtown DC, it takes up two square city blocks. The project was delivered as a traditional Design-Bid-Build project with a CM agency to help oversee construction. The method seemed very appropriate based on the owner’s experience and the unique demands of the project.

The schedule depicts the long design time as well as the congestion the project will feel due to overlap of trades when construction gets into full swing. The site is very tight, being in the center of the city. Also, the courtyard poses several issues due to the lack of access through the building. The building has a wide variety of building systems, highlighted by its existing structurally arched masonry and the use of the chimneys as mechanical chases.

The estimates used to find cost information on the project appeared to be very inaccurate due to the unique constraints of the project. The actual cost per square foot was much higher than the estimates bore out. The local construction conditions in DC favor concrete construction, which will be used in the courtyard. Also, though the project does little recycling, many of the historical materials in the building will be restored and reused. Though the storage of the materials will lead to further congestion.

Smithsonian Institution is a unique client who has many attributes of a government agency, however they tend to favor higher end work and finishes. The historical nature of the building is of utmost importance to the owner, creating some unique situations and opportunities. The key interests of the owner lay in timely completion due to the significance of the opening date, the 170th birthday of the building and the 4th of July. Also, the level of quality expected is very high. All in all, the project is very complex and unique.

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