

2.0 Executive Summary

The purpose of this report is to provide building and project information on the Westinghouse Building 4 project as well as discuss three separate studies showing different aspects of the project.

Areas of investigation include:

- Client Information
- Project background and history
- Project delivery system
- Key project team members
- Existing conditions
- Major building systems

In addition to the aforementioned topics, three analyses including: Using precast panels for the building façade, integrating a rooftop photovoltaic system into the building, and Using a Short Interval Production Schedule (SIPS schedule) to complete the building finishes. The combination of this building information and in-depth analyses will show how inefficiencies can be eliminated and sustainable practices can be incorporated into Westinghouse Building 4. These studies will also show how project duration and cost will be effected by changing the different aspects of the project.

2.1 Analysis 1

The first analysis conducted involves changing the façade of Westinghouse Building 4 from brick masonry to light-weight precast panels. This switch will eliminate waste and save time on the project. This activity is not on the critical path of the project so the savings will be in the material and labor costs of installation. By using a precast concrete panel it was found that the project team could save \$84,000 and save about 22 days in construction time.

2.2 Analysis 2

Analysis 2 involves the integration of a rooftop photovoltaic array into the buildings systems. Generating a portion of the building's power, the system would not only pay for itself in less than 15 years but also become a pinnacle in Westinghouse's push to be seen as a "green" company. The up-front cost of the system would be substantial, but through grants from the government and utility company, the costs would be brought down to a manageable figure.

2.3 Analysis 3

The final analysis involves using a Short Interval Production Schedule, or SIPS schedule, to complete the interior finishes of the building. By using this type schedule 3 weeks could be saved on the project. This would equate to approximately \$78,000 in general conditions cost, but would also allow Westinghouse Employees to occupy the building that much sooner. Early occupation of their new building would be a huge plus to Westinghouse because they are currently renting office space in other buildings while Building 4 is being completed.