



ROBERT M. LEICHT
CONSTRUCTION MANAGEMENT OPTION
ADVISOR: DR. JOHN MESSNER
BLDG: SMITHSONIAN INSTITUTION
PATENT OFFICE BUILDING
WASHINGTON, DC
11/12/04
TECHNICAL ASSIGNMENT 3

EXECUTIVE SUMMARY:

THE SUBMISSION OF TECHNICAL ASSIGNMENT INCLUDES THE SITE LAYOUT PLANNING WITH THE THREE MAIN PHASES: EXCAVATION, ERECTION, AND INTERIOR WORK. THERE ARE MINIMAL CHANGES BETWEEN THE PHASES BECAUSE THE BUILDING IS A RENOVATION PROJECT. THE TEMPORARY UTILITIES ARE FAIRLY SIMPLE BECAUSE THE CONTRACTOR CAN USE THE EXISTING POWER, WATER, ETC, WHILE THE CONSTRUCTION GOING ON. THE CONTRACTOR DOES NEED TO COORDINATE THE SWITCHOVER FROM EXISTING TO THE NEW UTILITIES IN ORDER TO MAINTAIN OPERATIONS. THE DETAILED SYSTEMS ESTIMATE SHOWS A LARGE VARIATION FROM THE PREVIOUS TWO ESTIMATES, MAINLY DUE TO THE UNSTATED ASSUMPTIONS IN THE SQUARE FOOT AND ASSEMBLIES ESTIMATES THAT THE BUILDING PROJECT IS NEW CONSTRUCTION. SINCE THE PROJECT IS A RENOVATION THE DETAILED ESTIMATE TAKES INTO ACCOUNT THE PLACEMENT METHODS NEEDED AND THEREFORE BEARS A HIGHER COST OF INSTALLATION. THE GENERAL CONDITIONS ESTIMATE WORKED OUT TO BE APPROXIMATELY 3% OF THE OVERALL CONSTRUCTION BUDGET. THE RESEARCH AND ANALYSIS METHODS GO INTO DETAIL ABOUT THE GOALS AND OBJECTIVES OF THE RESEARCH AND THERE IS PRELIMINARY VERSION OF THE SURVEY TO BE USED FOR THE RESEARCH.

Submission Contents:

- ◆ Site Layout Planning
- ◆ Temporary Utilities
- ◆ Detailed Systems Estimate
- ◆ General Conditions Estimate
- ◆ Research & Analysis Methods

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