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CONSTRUCTION MANAGEMENT

URBINUS COLLEGE RESIDENCE HALL 2
COLLEGEVILLE, PENNSYLVANIA



A. Executive Summary

The following proposal contains three topics that will be examined and researched to provide alternative methods to adjust the cost, schedule, constructability, and offer any value engineering that may be discovered during the research. These areas are meant to be similar and illustrate an overall theme to the second semester coursework for this particular thesis project.

The first analysis including structural breadth will review the foundations of the structure and the soil bearing capacity. This analysis will provide information regarding the cost and constructability of two different options; deep dynamic compaction and a complete soil exchange. After completion of the analysis I hope to provide a less expensive and viable alternative to achieve proper soil bearing.

The second breadth topic will review the structural system of Residence Hall 2. A complete precast system will be researched and compared to the existing system of CMU load bearing walls and precast plank. As part of this analysis there will also be a design of a temporary heating system that will be necessary for the existing conditions as the exterior masonry will be erected during the winter months.

The final research topic will be precast concrete safety in the construction industry today. An analysis of previous projects that required more stringent safety requirements than those required by OSHA will be used to develop a site specific safety plan for Residence Hall 2 and information about the need for more stringent safety guidelines to be followed by the construction industry.