Breadth Proposal



Geisinger Hospital for Advanced Medicine Danville, Pennsylvania

Prepared for:
Dr. James D. Freihaut
Department of Architectural Engineering
The Pennsylvania State University

Prepared by: Jen Redington Mechanical Option

Proposed Breadths

Electrical

The installation of a CHP plant would require some redesign of the electrical systems. Instead of all the electricity being supplied by the utility, most of it will be coming from the CHP plant. However a hook-up to the utility will still need to remain for when loads exceed the CHP plant's capacity and in case of any equipment maintenance needed. The amount of power needed for normal operation must be determined along with emergency power that would be needed from the utility.

Architectural

The installation of the CHP plant will require a redesign of the boiler plant housing, the building will probably have to be resized to make room for the new equipment. Also the installation of a DOAS may open up more space in the hospital on the fourth floor, due to the decreased sizes of the air handling units in the fourth floor mechanical room. The main focus of this breadth will be to adjust the site plan and incorporate changes that will need to be made to the boiler house, elevations and floor plans of the boiler house may also be made. Open space on the fourth floor will be redesignated in floor plans and impacts to elevations will be considered.

Thesis Proposal Page 2