

Geisinger Critical Care Building

Geisinger Wyoming Valley Campus

1010 East Mountain Drive
Plains, PA, 18705

Project Team:

ARCHITECT:

Francis Caufmann Foley Hoffman

CONSTRUCTION MANAGER:

Alvin H. Butz, Inc.

STRUCTURAL ENGINEER:

O'Donnell & Naccarato, Inc.

MEP ENGINEER:

RAM-TECH Engineers

Building Information:

SIZE:

165,525 sqft.

TOTAL ESTIMATED COST:

\$52.5 million

PROJECT DELIVERY:

Design-Bid-Build

DATES OF CONSTRUCTION:

October 2006 - September 2008

Structural:

- The Geisinger Critical Care Building (GCCB) foundation is a combination of 4" and 6" slab-on-grade with welded wire reinforcement on top of 6" crushed stone.
- Floor systems consist of 3 1/4" lightweight concrete on 2", 20 gage Lok-Floor Deck Reinforced with 6x6 - W2.0xW2.0 welded wire reinforcement.
- Balloon framed steel allows for combination glass and masonry curtain wall on building exterior designed to match existing Geisinger Wyoming Valley (GWV) campus structures.
- Roof structure is a combination of lightweight concrete on composite decking and sloped steel.

Architectural:

- New construction is connected to existing buildings by way of three causeways, each running the full four story above ground height.
- GCCB has twelve state-of-the-art operating suites specialized for various types of technology, such as robotics and minimally invasive procedures
- The roof structure includes a helipad for LifeFlight transportation as well as a dedicated elevator to serve air lift patients

Electrical:

- The GCCB, upon completion, will become the primary electrical service entrance for the entire GWV Campus.
- Electrical space will contain a 1200A, 15kV primary switchgear feeding a dual-ended 1600A, 480/277V secondary switchgear serving the Critical Care Building
- GCCB institutes a 300kVa, 480/277V UPS 3P, 4W emergency power generator for critical failures that has capacity for expansion to 600kVa.
- Lighting is primarily fluorescent, with special consideration given to clean areas such as operating and decontamination rooms.

Mechanical:

- Like the electrical system, the new mechanical equipment will serve existing campus locations as well as GCCB.
- Four separate air handling units serve the space, with space reserved for additional campus expansion.

<http://www.engr.psu.edu/ae/thesis/portfolios/2009/jch248/images/index.htm>

JOSEPH HUGHES

LIGHTING/ ELECTRICAL OPTION