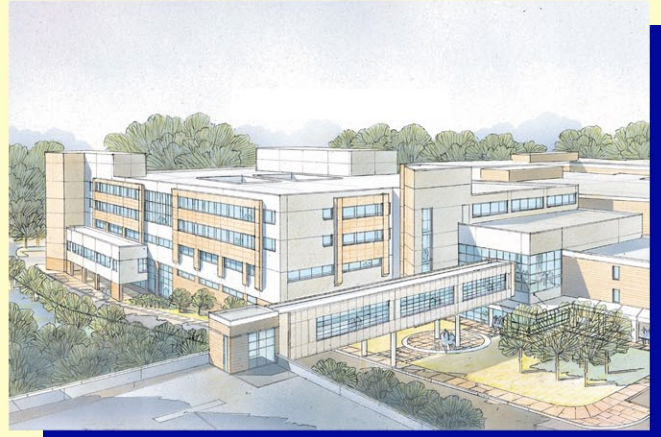


Unknown Hospital Expansion

Anytown, USA

Building Information

Size: 281,000 SF
Stories: 5 Floors w/ Penthouse Roof
Occupancy Type: Healthcare Facility (Emergency Department, OR Surgical Department, In-Patient Care)
Cost: Unknown
Delivery Method: Design-Bid-Build
Schedule: March 2007 - May 2009



Architecture

Two-tone EIFS facade with Curtainwalls, Aluminum Windows, and brick detailing along the ground floor

3-Story Arrivals atrium lobby space

Enclosed Bridge Vestibule linking arrivals lobby and recently constructed parking garage

Two atrium spaces beginning on the 3rd floor open to the environment

126 Private Patient Care Rooms

Flat EPDM Roofing System

Structural

Structural steel system designed for future expansion on the rooftop

6" slab-on-grade with concrete spread footings and continuous strip footings along the facade

5 1/2" & 7 1/2" composite elevated slabs with normal and light weight concrete

Floor-to-Floor Heights: 13'-0" or 14'-0"

Mechanical

4 AHUs on the 2nd Floor & 5 Roof Top Units totaling 324,750 cfm potential

1 closed-loop Cooling Tower, 1 Heat Exchanger, 2 Chillers, 1 Glycol-Chiller, 3 Hot Water Boilers, and 1 Steam Boiler

Lighting/Electrical

2 independent service lines feed 35 KV switchgear

120/208V system for receptacle
277/480V system for lighting

Two diesel generators backup system with 2500KW and a 7 second startup time

<http://www.engr.psu.edu/ae/thesis/portfolios/2009/rmk5002/>