



Patient Care Center & Facility Service Building

design team

- **Owner** • St. Joseph Health System •
- **Architect** • **NBBJ** •
- **Civil** • KPFF Consulting Engineers •
- **Construction**
 - Services McCarthy Building Companies INC. •
- **Structural** • KPFF Consulting Engineers •
- **Equipment**
 - Technology Foundations INC. •
 - NBBJ •
- **Interior Design + Graphics**
 - Mechanical + Electrical •
- Syska & Hennessy INC.
 - Davis Design •
- **Low Voltage Consultant**
- **Acoustical Consultant**
 - Martin Newson and Associates •
- **Security Consultant**
 - Diversified Security Systems •

statistics

- 252,712 sq. ft •
- 4 stories + basement •
- 82'-0" tall •
- costs \$130 million •
- guaranteed maximum price •

architectural

- etched inspirational message on exterior glazing •
- braced frames accentuated through the exterior glazing •
- 19'-0" tall canopy located at the main entry •
- patient rooms overlooking central courtyard •
- exterior facade consists of precast concrete panels + stucco facade facing the central courtyard + metal equipment screening @ roof •

structural

- floor system consists of composite steel framing •
- typical floor areas designed for 80 psf •
- lateral system consist of a series of concentrically steel braced frames on levels above ground while shear walls are used @ basement level •
- pile foundation system is used to support the main entry canopy , while continuous deep footings support the shear walls •

electrical

- 4 substations feed (2 emergency) •
- substations feed @ 480/277V , 3 Phase, 4 Wire •
- 45-300kVA transformers located on every floor •

lighting

- typical lamps 32W compact fluorescent •
- photocells control hospital dimming system •

mechanical

- 8 air handling units supplying 36,000 - 70,000 CFM •
- 2 unfired clean steam generator supplying @ 4000 lbs\hr •
- each room is equipped with a terminal air unit meeting patient's comfort •
- campus chiller water and steam used to condition water supply •

| nasser marafi | structural option |

<http://www.arche.psu.edu/thesis/portfolios/2008/nam202/>