

# COPPIN STATE UNIVERSITY PHYSICAL

### **EDUCATION COMPLEX**

Baltimore, MD



Size: 246,000 gross square feet

Number of Stories above Grade: 1-4

Project Cost: \$136,000,000

Construction Cost: \$110,000,000

Broke Ground: October 2007

Project Completion: February 2010 Delivery Method: Design-Bid-Build

#### Architecture

With it's varying height changes and expansions surrounding the adjacent field and track, the complex welcomes its guests allowing the balance of brick and glass to complement it's features. It houses an arena with 4,100 seats, 8-lane pool, fitness center, dance studio, auxiliary gym, maintenance and public safety as well as a future satellite central utility plant.



Owner: Maryland Stadium Authority

Architect: Cochran, Stephenson & Donkervoet, Inc.

Construction Manager: Gilbane

**Electrical Engineer:** Diversified Engineering

Mechanical Engineer: James Posey Associates, Inc.

Structural Engineer: Hope Furrer Associates, Inc.

#### **Electrical/Lighting System**

The complex is mainly lit with fluorescent lighting with pendant mounted lighting fixtures in the pool and arena areas. The main switchboard and panelboard run on 3 phase, 4 wire 480/277 volt system. Other panelboards use 3 phase, 4 wire 208/120 volt system.



#### Mechanical System

There are a total of 14 air handling units some are interior while others are exterior. Each unit serves a separate zone through variable air volume systems. In the central utility plant there are three 250hp boilers with available expansion for 2 additional boilers. There are also two 500 ton chillers located in the central utility plant with room for 2 future chillers.

## Structural System

Overall the complex is sub-divided into 4 smaller buildings through expansion joints. It is comprised of beams and girders that are spaced evenly throughout the building while moment frames make up the lateral system. The foundation is composed of spread footings and the beams and columns are widespread W-shapes.