

Wesley A. Brown Field House

Annapolis, Maryland



UNITED STATES NAVAL ACADEMY

Project Team

Owner: NAVFAC

Architect: HKS Inc.

CM/GC: Hensel Phelps Construction Co.

Mechanical Designer: Kavocs Whitney & Assc.

Electrical Designer: M. C. Dean

Structural Engineer: Thornton Tomasetti Group

Project Overview

Size: 140,000 sqft.

Total Levels: 2 levels including the Mezzanine

Delivery Method: Design-Build

Project Cost: Approximately \$45 million

Occupancy: Collegiate multi-sport athletic facility

Mechanical

(2) 42,000 CFM AHU to condition the Field Arena

(1) 12,000 CFM AHU for Lockers and Showers

(1) 7,850 CFM AHU for Weight Training & Sports Medicine

Wet pipe fire suppression sprinkler system

Electrical & Lighting

2 Main transformers fed from 13.8kV primary switchgear.

Secondary 480/277 volt, 3 Φ , 4 wire, 60 Hz double ended switchgear.

Pulse start metal halide luminaires in the field arena.

Emergency and exit lighting will use batteries for back up power.

Architectural Features

The field house has a 6-lane 200m track with hydraulically-actuated banked curves that retract to sit flush with surrounding surface.

A roll-out Magic Carpet enables the field house to be transformed into a turf field.

Large curtainwall windows incorporated into the precast panel exterior skin overlooking the Santee Basin.

Structural

Drilled Pressure-Grouted Displacement Piles
Reinforced .25M thick concrete slab.

Structural Steel Columns supporting box trusses
60 mil felt-backed PVC membrane roof with 4" insulation board and vapor barrier, on 3" metal deck.

Blast resistant precast concrete and curtainwall exterior.



Hensel Phelps
Construction Co.

Peter J. Schneck
Construction Management

The Pennsylvania State University



<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/PJS252/>