

# BUCKNELL ATHLETIC CENTER

BUCKNELL UNIVERSITY

LEWISBURG, PA

## Location

The Bucknell University Recreation & Athletic Center will be fully completed by June 2003 in East Buffalo Township.

Ewing Cole Cherry Brott provided the AEI services, as R.S. Mowery & Sons handled the bulk of the Construction Management duties.

## Project Highlights

A new 4,000 seat gymnasium/Sport Arena.

A 54-meter-by-25-yard Olympic pool.

5,000 sf student fitness center & instructional strength area.

## Overview

Bucknell's Athletic Center is under construction and will connect to the existing facilities to create a campus union. The university has 3,200 students & 27 varsity programs.



## Mechanical

- The air handling systems will consist of a combination of Constant Air Volume (CAV) and Variable Air Volume (VAV) systems.

## Electrical

- A single three-phase padmount transformer will provide power for the new athletic facility. The basketball court will be illuminated with high bay metal halide sports luminaries, pendant mounted from the structural truss.

## Plumbing

- Chilled water will be supplied from distribution mains - part of the campus's system upgrade. Varying pressure steam systems will serve hot water to the new and existing facilities.

## Fire Protection

- Fire walls will be maintained at the entrance of the New Arena and the existing field house.

## Structural

- Normal weight concrete will be used where vibration poses a problem.
- The balance of the roof construction will consist of galvanized metal roof deck supported on steel joists and wide flange beams & girders framing to wide flange steel columns.
- Many existing campus buildings have been supported by shallow foundation systems. Strip footings will be used to prevent uneven settlement under most New Arena, where potential sink holes are expected.
- Combinations of truss & frame lateral systems are used in gymnasium design.

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