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98 Rebeschi Drive • North Haven, CT 06473
(203) 865-6043 • FAX (203) 865-6847
Internet: www.petraconstruction.com
E-mail: twooding@petraconstruction.com

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University Vision Becomes Reality

University of New Haven (UNH) President Dr. Steven H. Kaplan quickly established his top priorities when he arrived on the West Haven, Connecticut campus in 2004. The University needed a recreation center for students to exercise and socialize. The "signature building" would need to project an enhanced image of the school, be the starting point for campus tours, and create a great first impression for campus visitors.

UNH selected Petra as its Program Manager to organize and manage this special project. "We conducted our kick-off meeting with the UNH project team on December 21, 2004," recalls Tom Beebe of Petra. Through a series of team meetings, UNH evaluated the architects' proposals, conducted interviews, and selected Sasaki Associates, Inc. of Watertown, MA to assist them with site selection and design of the building. An intense and very focused project team established the "building vision statement," incorporated student input, completed programming and developed the conceptual design.

In the meantime, Petra coordinated the boundary survey of the selected site to establish property lines, locate underground utilities and identify any property easements. Test borings were completed and the geotechnical engineer delivered the first challenge to the team. The soil was not stable enough to hold the weight of the massive building. An expensive and time-consuming option would be the installation of piles or caissons to support the concrete foundation. Petra encountered the same challenge in the construction of a nearby, recently completed student dormitory project. As suggested by Petra, the geotechnical engineer evaluated a more cost-effective solution: aggregate piers. Aggregate piers are essentially holes drilled in the soil and filled with compacted stone, to provide load-bearing capacity. The challenge was addressed and planning continued.

The new David A. Beckerman Recreation Center at the University of New Haven.

At the end of each design phase, Petra's estimating department completed a detailed construction cost estimate, to allow UNH to see exactly where they stood against their original budget. "We also established and updated a complete soft cost budget for the University to identify and monitor all owner costs, including items such as design fees, structural peer review fees, traffic consultant fees, and costs for athletic equipment, signage, furniture, fixtures and equipment (FF&E). These reconciliations allowed the University to make good decisions during each design phase, and to keep its Board apprised of the project's financial status," said Tom Beebe. UNH also selected Petra as its construction manager, and Sasaki proceeded to complete the construction documents.

Nancy Freedman, Sasaki Principal and Project Manager commented, "Petra and Sasaki worked hand in hand to resolve the inherent challenge in this project-staying within the budget. Early on, Petra suggested several cost reduction

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opportunities. These suggestions were vetted through the project team to understand their full implications. Each idea was ultimately implemented, resulting in a wonderful facility that delivers great value for every dollar spent. The teamwork between UNH, Petra and Sasaki was unparalleled."

Petra's Senior Project Manager, Al Pacelli, mobilized his construction team to prepare for the construction phase. Al had previously participated in the design phases to evaluate constructability and help the team make cost-effective decisions.

The completed design produced a dramatic two-story building of 56,504 square feet containing two full basketball courts, a multi-activity court (MAC), a suspended jogging track, 6,000 square feet of fitness space, two multipurpose rooms, student activity spaces and two racquetball courts.

Beginning with the conceptual design, and through each design phase, Petra reviewed the plans with City of West Haven officials to solicit their input and to keep them apprised of the project status. "We were faced with several challenges in the early design stages," said Tom Beebe. "The Connecticut Building Code was in the process of changing, which would result in a more expensive design. Also, the number of restroom fixtures varied by interpretation of the use of the facility. We successfully resolved both issues with the West Haven and State of Connecticut Building Officials, resulting in more usable floor space for UNH." The site also presented more

The three courts are surrounded by the indoor jogging track and dramatic glass wall.

opportunities for creative solutions. A portion of the land was encumbered by a ground lease, requiring the purchase of five nearby land parcels and with Petra's assistance, rezoning, designing and obtaining regulatory approvals for new parking lots.

With approved construction documents, a Guaranteed Maximum Price (GMP) from Petra and all local and state approvals in hand, site work began with the installation of 250 aggregate piers to support the largest single construction project in UNH history. Several existing underground utilities were relocated, including the main voice/data vault feeding an adjacent facility. Over 2,500 cubic yards of excess soil were relocated to another part of the campus for landscaping improvements. Petra assisted with the regulatory approvals and managed the soil relocation. Construction progressed at a rapid pace.

Petra's Program Manager, Will Kendig, assisted the University in arranging for the installation of furniture, fixtures and equipment in conjunction with the final stages of construction. UNH opened the doors to the new David A. Beckerman Recreation Center to a large crowd of eager students, faculty and staff on December 10, 2007. During the first week, more than 2,000 visitors experienced the state-of-the-art exercise equipment, glass enclosed running track and a variety of new fitness programs.

"As our Program Manager, Petra kept us focused and disciplined throughout the entire project, from architect selection through budgeting, to installation of the building signage," said Bill Leete, UNH Vice President for Facilities during the project. "As our Construction Manager, Petra upheld our interest in delivering the highest value building specifically for our needs, and within our aggressive time frames." Petra is proud to be part of the University's transformation.

To discuss program management or construction management services, please call Guido Petra, President or Terry Wooding, Executive Vice President at 203-865-6043.