

FAIRVIEW SUITES Student Apartments

Like all universities, Lock Haven University (LHU) has had to face the problems associated with remaining competitive with the myriad educational opportunities available to students in the 21st Century. One of the key challenges in meeting the demands of the current generation of college students has been the change in expectations about student living quarters.

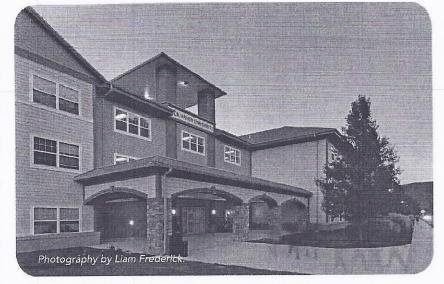
"We learned that 18-year olds don't want to live in the same dorms that you and I were used to," explains Paula Kistler, director of foundation operations for the Lock Haven University Foundation. "They don't want a cinder block room where you grab your robe and toilet kit and go down the hall to the bathroom. All across the SSHE system, we are making changes so that we can compete for students."

Pennsylvania's State System of Higher Education (SSHE) recognized the systemic nature of the challenge and created an approach to the needs of the universities that could work system

wide. Each of the universities was tasked with assessing the needs for student housing, doing a feasibility study and a plan for accomplishing the goals that arose. To help the SSHE schools undertake such a major capital program without adding massive debt to the balance sheets, the universities' 501-3C non-profit foundations were empowered to issue bonds to raise the money needed for construction. The bonds were backed by the revenue that would be generated by room fees over the life of the bonds (the same was true for student and convocation centers, which could repay the bondholders from usage fees).

PASSHE also created a blueprint for the new housing that required the schools to solicit proposals from teams that included a private developer with experience in new student housing. The developer's response would include design and construction professionals to create a turnkey approach to the new residences. This approach created a boom of student housing beginning in the middle of the last decade.

Lock Haven's 2009 master plan - done by WTW Architects - found that the campus had 517 fewer beds than its student and capacity predicted that the need would exceed 600 beds by 2013. While selecting a site for the new apartments was relatively easy - Kistler says, "The site was a no-brainer. It was the only piece of level ground we had." -LHU was still early in the process and put



the project on a fast track. "SSHE required us to work through the foundation to create a public/private partnership," says Kistler. "We were required to select a nationally-recognized developer. We went through a multiple interview and scoring process"

The LHU Foundation issued an RFP the following fall and in late October 2010 selected the team assembled by Capstone Development Corporation (now Capstone Development Partners), from Birmingham, AL.

Capstone's team included Mascaro Construction as contractor and the STV Group as architect and engineer for the design. Mascaro had previously worked with Capstone on several projects, including new housing at Washington & Jefferson College, Marshall and Clarion University. Capstone has developed 81 projects in almost all 50 states since 1997, including five in Pennsylvania. The familiarity helped, as the university was interested in getting the new apartments, called the Fairview Suites, open for the 2012 school year, which was slightly more than 18 months away.

The program called for building more beds than were projected to be needed, ultimately settling on 682 beds. LHU's site for the project was a former silk mill located at the western edge of the campus along North Fairview Street. Although the site was level, it fell away to the south and single-family homes were directly across the street from the new building. What the site left the architects was a large building that could really only run from east to west, meaning that the front and rear elevations would be roughly 800 feet long. The configuration gave the architects a difficult design challenge.

"The initial concept from the university was two separate buildings, one on top of the hill and one at the bottom, but during the RFP process they realized they could buy more land and would have one long building on top," explains Michel DeTurck. "The biggest challenge with that was this was a long narrow site with a hillside running right through the middle it. There were places where it was a 40 foot cliff and others where it was just a very steep hill. The site planning was probably the most difficult aspect."

DeTurck notes that with such a severe change in grade there are challenges in trying to fit parking lots, make the building accessible for those with disabilities and to create good circulation within the building. And the building's unusual length made it difficult to give the exterior the kind of residential feel that was appropriate for an apartment in a small town neighborhood.

"It isn't easy to give a residential look to a building that is the length of two-and-half football fields," DeTurck jokes. "We tried to break the building up by arranging it so that it was like several buildings that were attached rather than one long building. We changed materials and how they were put together to break up the exterior and soften the building's mass and length."

The final design resulted in a facility that is nearly 200,000 square feet, with hardboard siding and a brick that matches most of LHU's other buildings as the main exterior finishes. The roof consists of mostly shingled gable roofs, with the roofline broken up into about ten individual sections for a more residential scale. Individual apartments contained two beds, either in separate bedrooms with a small common area or in a more traditional layout of two beds per room with a divided private bathroom.

As the project was being planned the LHU Foundation was keeping an eye on the financial markets. Interest rates were low and creeping lower throughout the spring of 2011 but the concerns over defaulting sovereign debt in Europe and America was making bond prices volatile. Since the \$35 million project was going to be financed through a bond issue, LHU wanted to sell its bonds into a market that wasn't getting an unnecessary premium because of unrelated worries.

"We watched the bond market closely. We were scheduled to finance the project in mid-May but couldn't until the end of June so that put us six weeks behind before construction started," notes Kistler. "Mascaro was sitting just outside the construction site waiting for us to call so that they could attack the site."

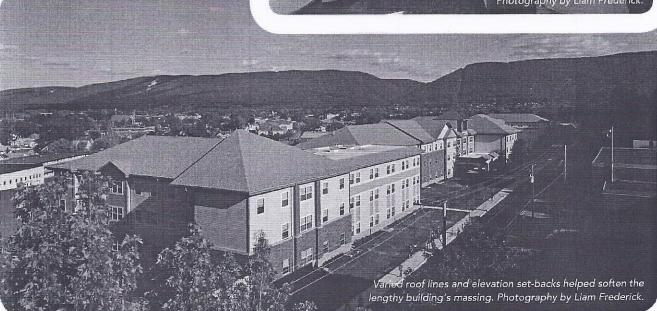
When financing was secured in late June, Mascaro moved quickly to try to make back the ground lost in preconstruction and ran head first into another delay.

"We started construction the first week of July and had a big issue right away. The site was supposed to be a balanced cut and fill of a few thousand yards," explains Bob Singleton, Mascaro's project manager. "As soon as we started digging we hit bad soil.

We ended up bringing in 40,000 yards of fill." Fairview Suites was going on a former industrial site. The former silk mill had not created a hazardous site or environmental problem but the practices of early 20th Century manufacturing were the source of the soils problem. "You know those old factories," says Kistler. "They just took their trash and dumped it out the back door."

The trash Paula Kistler speaks of was actually not trash but ash, the remains of burning both





"It isn't easy to give a residential look to a building that is the length of two-and-half football fields," for heat and to dispose of refuse. Although it wasn't hazardous, the ash was unsuitable for compaction. Cutting out the unsuitable soil and filling the site was a significant added cost due to unforeseen conditions but the cost was not the biggest headache.

"The trouble was that all the trucks in the area were tied up with the [gas] drilling that was going on in the area. We couldn't get trucks," says Singleton. "With 40,000 yards you could run trucks all day for a while but there were some days we could only get four or five trucks in and out. The site problems put us six weeks behind on the construction schedule."

With work starting late because of the delay in the bond issue, this additional problem put Mascaro twelve weeks behind the original plan for delivering the apartments before August 2012. Paula Kistler was pleased to discover that there was no request for a new schedule in spite of the problems.

"Not once, even from a subcontractor did I hear the word delay from the team. Neither Capstone nor Mascaro ever considered a delay. That was communicated down to the subcontractors and suppliers," she says. "The attitude was just, here's the situation,



now how are we going to work our way through it. It was an absolutely incredible team. I don't think we could have done it with another team."

Dealing with the site problems also created a sequencing problem because the location of the unsuitable soils was at the opposite end of the building from the mechanical wing, which is ideally where the work would have started by bringing in the utilities for the building. With such a long building, starting the excavation 800 feet away from where the utilities connected was a significant inconvenience.

Mascaro's team for the Fairview Suites included a number of subcontractors that have worked with them many times but a few of the key subs were new to Mascaro and Bob Singleton. Turnkey Electric and PA Masonry are both based in Lock Haven and while each has done the lion's share of work at Lock Haven University, neither had subcontracted to Mascaro. Singleton is effusive in his praise for both.

"Turnkey did a phenomenal job. The quality of PA Masonry's work was among the best I've seen in 33 years on the job," he says. He also highlighted the role that Easley & Rivers played. "I can't say enough about the work E & R did. We loaded them up. They did the drywall, framing, cabinetry, doors and hardware. Neal Rivers just stepped up to the plate and got things done."

Singleton points out that the level of cooperation among all the subcontractors on Fairview Suites was as extraordinary as Paula Kistler observed.

"It sounds corny but it really was a team effort. There were times when subs went out of their way to help another subcontractor," he says. "It was a good team and a good attitude. From the start we saw that the architect was ready to work with us. We saw that Paula was willing to work with us. That makes the contractors willing to work together and quite frankly, it helped to know that we were all getting paid regularly and on time."

Mascaro's management team included project engineer Zach Brehm and superintendent Mike Salopek.

The teamwork went a long way towards reeling the schedule back in but it helped to get a little good luck from Mother Nature.

"Last winter was pretty mild. We didn't miss a day all through the dead of winter," Singleton recalls. "I doubt there are many winters you can say that in Lock Haven."

Mascaro's team took full advantage of the good fortune, adapting the critical path sequence as the work accelerated. Work was completed almost twelve months from the start in July 2012, which was two weeks ahead of the original schedule. Within three months the apartments were 100 percent occupied. Since the opening, Lock Haven University was notified that the Fairview Suites had been certified LEED-Silver NC. LHU has plans for another phase of student apartments, which Singleton says Mascaro was hoping to roll right into, but the university is being more conservative in light of the state's funding issues. Whether or not the project goes ahead in the near future, Paula Kistler is clear about how she wants things to go.

"We're doing a new science building that was a state bid job and it's not going as well. Both Turnkey and PA Masonry are on that job too and they tell me all the time they wish Mascaro was the general," she says. Kistler believes that the delivery system used on the Fairview Suites project made their success possible. "We couldn't have achieved that kind of schedule if we were held to doing things the state's normal way. If I had my druthers I'd build everything I ever do with Mascaro."

PROJEGI TEAM

Mascaro Construction	. General Contractor
Capstone Development Partners	
Lock Haven University Foundation	. Owner
STV Group Inc	. Architect & Engineer
Renick Brothers Mechanical	
EMCOR/Scalise Industries	
Turnkey Electric	Electrical
Easley & Rivers Inc	
Eagle Construction	
Mid-State Roofing	
Glass Erectors Inc	
Eastern Elevator Service & Sales	
PA Masonry	Masonry
Lisanti Painting Inc.	
Massaro Industries	Ceramic Tile