



Lindenwood U Resource Center Features “Tree Glass” and “Magic Glass” Windows

By KERRY SMITH

Lindenwood University's new \$22 million library and academic research center (LARC) is tangible evidence of the institution's longstanding collaboration with St. Peters-based Blanton Construction.

LePique & Orne Architects Inc. of St. Charles and Blanton Construction have an ongoing professional relationship with the university's main campus in St. Charles and its satellite campus in Belleville.

The LARC is projected to be complete by August, in time to welcome nearly 10,000 students who will call Lindenwood their home this fall.

Jeffrey Blanton said the 100,000-square-foot, three-story, four-level facility combines traditional library functions with a host of other student services.

"It's part of a bold campus expansion plan that blends Lindenwood's rich academic history with stunning design and state-of-the-art learning resources," he said. "We've done approximately \$250 million worth of work for Lindenwood University over the past 15 years."

Blanton's father and the company's founder, Ben Blanton, served on the university's board of directors and knew the late Dennis Spellmann, Lindenwood's long-time president who grew the institution from the 800-student Lindenwood College into the Lindenwood University of today.

Founded in 1827, the privately owned liberal arts university sits on 550 acres in the heart of St. Charles. Blanton said his father was tabbed by Spellmann to build the university's first dormitory in many years after negotiations with the initial contractor stalled. "Dad said the only way he would agree to build it would be if there were no profit on the project," said Blanton, "and that's what we've done for all of Lindenwood's buildings of which we've been blessed to be a part."

LU's new LARC broke ground in October 2015, according to Blanton. The sloping topography of the St. Charles campus posed a familiar challenge to architects and general contractors, he said. "This facility is built into the slope on the First Capitol (Drive) or east side of the Lindenwood campus," Blanton said. "The soil condition and sloping grade that is common to this campus required us to construct nearly 1,000 piers. The piers alone took us about three months to complete."



A CENTURY OF SOLUTIONS

- Process Piping • HVAC • Refrigeration • Design/Build
- Piping Fabrication • ASME Code Work
- LEED Accredited Professionals • Data Center Solutions
- Automation Controls • Refinery/Power/Steel
- Energy Solutions • 24 Hour Service

www.murphynet.com

Specialty Contractor of the Year
(HVAC/Piping; AGC of Missouri - 2016)



St. Louis, Missouri
1233 North Price Road
St. Louis, MO 63132
(314) 997-6600

Denver, Colorado
3790 Wheeling Street
Denver, CO 80239
(303) 371-6600

Boulder, Colorado
4699 Nautilus Ct.
Suite 207
Boulder, CO 80301
(970) 646-8538

Colorado Springs, Colorado
1539 Paonia Street
Colorado Springs, CO 80915
(719) 772-6600

Ft. Collins, Colorado
2600 Canto Ct.
Unit D
Ft. Collins, CO 80525
(970) 646-8538



Custom Home Elevators of St. Louis, Inc.

Elvoron LU/LA

For limited use/ limited application



- Up to 6 stops
- 1400 lbs capacity
- Smooth, quiet ride

For more information please contact us:

Phone: (314) 423-1620

Toll Free: (800) 783-1620

www.customhomeelevators-stlouis.com



8582 St. Charles Rock Road
P.O. Box 142725
St. Louis, Mo 63114-2725



Up to 60 workers have been at the site on any given day, Blanton said. "In early February we had 23 union tradesmen hanging and taping drywall, in addition to six union electricians and a number of union painters," he said.

A major logistical challenge of the project will be transporting a 2,500-pound, 25-foot-wide by 14-foot-tall multimedia screen to the top floor of the new library by a lift and bringing it through the large window openings on the building's east side.

LePique & Orne Architects Senior Project Architect and Manager Dennis Elledge said

the signature design element of the new LARC facility at LU is a collection of "tree glass" feature windows designed for the north and south building facades.

"These large windows will contain an window mullion and glass design to represent a grove of linden trees, indigenous trees from which Lindenwood University got its name," said Suzanne Lercel, project designer for LePique & Orne. Seven unique hues of glass including shades of green, blue and gray comprise the windowed tree imagery, according to Lercel. "The tinted changes in hues are subtle and sophisticated, with the

objective of creating a grove of trees that occupants can identify amidst the natural backdrop of existing trees on the site," she said.

Another special feature is the "magic glass" technically known as electrochromic glass, also known as smart glass or electronically switchable glass, an innovative and modern building glass that can be used to address glare and heat gain in glass openings. "The unique characteristic of electrochromic glass is that it is able to provide variable sunlight control through the presence of solar sensors," said Elledge. "It controls the sun, glare and heat but still allows individuals inside the facility to see outside clearly." The "magic glass," according to Elledge, stops a large amount of the heat that would normally radiate through the glass, and it also minimizes harmful ultraviolet rays at the same time. "The LARC is one of the first structures in the Midwest to be fitted with this type of solar technology," he added.

A multimedia theater is another state-of-the-art element in the overall design plan. Located on the top story of the facility, the theater and adjacent multimedia office will enable students to practice their craft hands-on with an elaborate sound system and other audio-video technology, according to Dennis Orne, president of LePique & Orne Architects. "The IT department is being moved to this building," he said.

The technologically-saturated audio and video lab will offer students the opportunity to edit their own productions and project them in the adjoining theater space, according to Lindenwood University Dean of Library Services Elizabeth MacDonald. "Another signature feature of the LARC is a gaming center where all platforms will be represented," she said. "This directly supports the university's game design program, a new curriculum that is being introduced this fall."

Wireless connectivity will be available throughout the entire facility, MacDonald said, and LU's online learning department will be housed here. "All of our group study spaces will have the latest technology including whiteboard paint so students can write on these designated wall surfaces," she said. "In the past, students would have to visit a number of different buildings on campus to receive many of the academic support services that will now all be housed in this building." A virtual reality workstation is also planned.

Classroom spaces including a classroom of the future are among those planned for the LARC. "There will also be a space specifically dedicated to our education department

Planning is in our DNA at Drilling Service Company. Our owners, brothers Mark, Bruce, and Jeffrey Murphy grew up listening to their dad, Marshall, talk with superintendents and GCs until late evening, planning upcoming work in the field.



Their uncle Cliff, founder of the firm, developed relationships and trust with GCs and owners. He helped them apply the latest in deep foundation technology to their projects.

Starting their careers as operators or laborers, the brothers saw first-hand how much better an entire construction project can go when there is coordinated, collaborative planning up front on the foundation work.

Four of our guiding principles, which we call "Murphys' Laws," state:

- Remember that we're the first contractor on the job: How we perform sets the tone for the entire project.
- Communicate and collaborate to ensure smooth operation.
- Estimate every job realistically so there are no surprises.
- Train and equip ourselves for the unexpected.

Our best successes, and the best successes for the general contractors and owners with whom we partner, begin with conversation and planning before bids are ever let.

As we gear up for a busy year, we'd appreciate the opportunity to discuss the details of your upcoming work.

If we plan together, we can achieve success together.

www.DRILLINGSERVICECO.com | PHONE: (314) 291-1111

where students can gain hands-on classroom experience as they prepare for a K-12 teaching career,” she said.

Student academic support offices and student support spaces – where a group of students can easily meet to collaborate on a project – are an integral part of the entire building, as are seminar rooms and training rooms.

Elledge credited MacDonald her vision for the project. “She was amazing to work with,” he said.

The original 18,300-square-foot campus library, Butler Library, was built in 1929 to serve LU’s enrollment of 429 students, according to MacDonald. “In 1968, Lindenwood constructed an addition that doubled the space,” she said. “At that time, enrollment had grown to 675 students.” Today the library – still occupying 26,000 square feet – serves 11,620 students, according to MacDonald. “We’re really excited about the 100,000-square-foot facility. Not only will it give us room to grow, it will provide a multitude of collaborative workspaces for informal collaboration, hands-on technology and media production technology, a complete IT help desk that is attached to our reference and circulation desk and much more,” she said.

Ground level amenities include a Starbucks café, the circulation and reference desks, an information technology help desk, an area for library staff, classrooms and seminar space.

“There are two levels of seating in conjunction with Starbucks,” said Elledge. “One area overlooks ‘The Grove’ lobby and another overlooks the café.”

The new facility’s third and top level will include community space that opens to an outdoor covered terrace for students to study and collaborate and offers space for fundraising and reception activities, complete with a nearby catering kitchen and pantry.

“Collaborative space is an element that Lindenwood identified and prioritized throughout the pre-design and design processes,” Lercel said.

The lower level will house the university’s library archives and other collections requiring protection from the elements, according to Lercel. A language lab, classrooms, general administrative offices and approximately 64 desks that can be shared by adjunct faculty for the day will also be located on the lower level.

Incorporating a contemporary high-tech look for the facility’s interior with Lindenwood’s traditional, stately exterior to integrate the new library and academic resource center into the overall look of the 190-year-old university was also a key priority of the project. “The brick, stone accents and ornamentation is designed to visually simulate the styles of the various periods of construction and expansion on campus,” Elledge said. “We tried to find an optimal balance between the styles of the existing historic buildings and the more modern additions,” he said.

The increased capacity needs at Lindenwood made the new LARC building necessary, along with student services and a variety of technology-specific needs, according to Elledge.

Due to adequate planning related to parking needs on Lindenwood’s main campus, Elledge said only a minimal number of extra parking spaces needed to be created.

LePique & Orne’s history of design projects for Lindenwood includes roof replacements, construction and additions on the St. Charles campus and design of the Harlen C. Hunter Stadium.

Blanton Construction’s other LU projects include eight residence halls, the Spellmann Campus Center, Evans Commons, Lou Brock Sports Complex, Harlen C. Hunter Stadium, Hyland Arena and the J. Scheidegger Center for the Arts.



Lindenwood University’s new library and academic resource center includes a number of collaborative spaces with wireless connectivity where a group of students will be able to meet and work together informally on projects.

Sielfleisch

ROOFING, INCORPORATED

24 HR. EMERGENCY SERVICE
FOR REPAIRS AND LEAKS

You know us for
quality installation.

Call us for
rapid repairs.

Firestone
MASTER
CONTRACTOR
Firestone Building Products

NWBOC
WBE CERTIFIED

Locally Owned and Operated
Repairs, Re-roofs, and New Construction

www.SielfleischRoofing.com
636-349-2920