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# Daniels Faculty of Architecture, Landscape and Design – University of Toronto

by MATT CURRIE



Having just celebrated its 125th anniversary this year, the University of Toronto's Daniels Faculty is the longest-running post-secondary architecture program in the country. Reaching such a landmark inevitably inspires fond looks to the past, but the Daniels Faculty has its eyes trained very much on what's to come – specifically, its new home at 1 Spadina Crescent.

After receiving a significant endowment from faculty namesake John H. Daniels seven years ago, planning got underway to renovate the faculty's current College Street home. However, in considering its expanding fields of study, the restructuring of the faculty and the growth of the undergraduate program, it ultimately became apparent that it was time for a change.

"We were just a small boutique graduate faculty, and our old building really reinforced that," explains Richard Sommer, dean of the Daniels Faculty. "It has very nice studios, but a lot of the spaces are very disconnected. One of the most important things our new facility will allow is a much more connected and public set of spaces for the kind of collaboration we see as essential for design and architectural education today."

Somewhat ironically, the foundation of the Daniels Faculty's new home is a building even older than its current one. The structure at 1 Spadina, began life as Knox College Theological Seminary in 1874, and was later home to a First World War military hospital and Connaught Laboratories – a pioneer in penicillin manufacturing during World War II. Over the years, its Gothic Revival facade has grown into a true Toronto icon.

After winning an international competition held by the University, design architects NADAAA – led by principals Nader Tehrani and Katie Faulkner – earned the daunting task of finding a way to build upon that heritage without overshadowing it.

"The faculty was very involved in the design," recalls Faulkner. "It's rare that you have a client so sophisticated in the ways of not only deliberating the project but also delivering it. There was a mandate from them, even before we'd started the project, that it be an

overtly sustainable building. What that means is different to different people, but there are those on the faculty conducting significant research – looking to the building to reflect the school's pedagogy as well as supply the metrics of optimal performance."

Ultimately, it was decided to juxtapose the historic south-facing heritage building with an equally striking but considerably more modern three-storey building directly behind it, facing to the north – past and future melded together.

"The old build, the theological seminary, is a U-shaped building facing south," Sommer says. "All of the historic buildings were built when the city looked toward the lake and there was nothing going on to the north. It has a single-loaded corridor facing north, around what was previously a religious cloister, which is a large square block. The new design is built in the figure of the former cloister – it is basically a large, open-span, loft-like space where all of our design studios and our fabrication laboratories and our meeting spaces happen, and they're very open and fluid in character and flexible in their layout."

At the centre of these spaces is the principal hall. "Imagine a box that can be sub-divided for different uses," Sommer explains, "but the box is then surrounded by four or five other different boxes that have louvres or doors that open up so that when you have large events, there's not only the people in the hall, but there are other spaces that look onto that hall; that's a dynamic heart for the building."

One of the true standout features is the building's roof, which was designed to boost energy savings significantly by bringing in as much natural light as possible, while also allowing the structure itself to function as a provocative object of study for instructing the students who will soon be populating it.

"We worked with the design architect NADAAA on a number of different options for the roof to help bring light in, from both an envelope and a structural perspective," recalls structural consultant Tom Greenough of Entuitive. "We basically span core to core over

top of this third-floor space to create a column-free space that's very flexible to the program of the faculty for that space, and then also incorporating skylights into these trusses to bring in the natural light."

Constructing the new building might seem, on the surface, to be the far greater undertaking, but restoring and maintaining the former Knox College was fraught with complications. The project was initially conceived to be completed in two phases, but the extent of the renovations has led to the two phases being combined.

"Succeeding with the renovation and doing it well while maintaining the vision of the new piece was difficult from a financial/logistical perspective, but also from a psychological standpoint," Faulkner notes. "One starts a project like this with creative energy and vision, and these are tested through the trials and tribulations of unforeseen circumstances – there's a certain amount of exhaustion. The good news is, now that the renovation is complete and the contractor has broken ground on the new additions, we see the building as a whole. I think everyone gets a renewed shot in the arm when they begin to see the vision."

Running between the old building and the new is what Sommer calls a "dynamic corridor," an enclosed street that links all of the programs together while exhibiting all of the state-of-the-art new interiors, including the library's main reading room, the various fabrication and 3D printing spaces, and the principal hall.

What's more, the north building will be flanked by a series of single-storey pavilions; one will be the new home of the Faculty's newly formed Global Cities Institute, a cross-disciplinary research initiative devoted to gathering, analyzing and standardizing data on cities across the world. There are also plans for a state-of-the-art 4,000-square-foot space called the Model Cities Theatre and Laboratory, which will allow students and faculty to experiment with immersive multi-dimensional modelling to develop technologies and strategies that will change the way cities are planned and urban design problems are solved.

## LOCATION

1 Spadina Crescent, Toronto, Ontario

**OWNER/DEVELOPER**  
University of Toronto

**DESIGN ARCHITECT**  
NADAAA

**ARCHITECT OF RECORD**  
Adamson Associates Architects

**HERITAGE ARCHITECT**  
ERA Architects

**CONSTRUCTION MANAGER**  
Eastern Construction Company Limited

**STRUCTURAL/  
BUILDING ENVELOPE CONSULTANT**  
Entuitive

**MECHANICAL CONSULTANT**  
The Mitchell Partnership Inc.

**ELECTRICAL/SECURITY/  
AV/LIGHTING CONSULTANT**  
Mulvey + Banani

**LANDSCAPE CONSULTANT**  
Public Work

**CIVIL ENGINEER**  
A.M. Candaras Associates Inc.

**LEED CONSULTANT**  
MMM Group Ltd.

**TOTAL SIZE**  
126,293 square feet

**TOTAL COST**  
\$72 million

It's position as a gateway from university to city means that the reimagined Daniels will have significant public implications as well. The principal hall will not only provide space for large classes and reviews, but also host the Faculty's popular public lecture series, which offers students, professionals and the general public the opportunity to hear from some of the world's prominent architects, artists and scholars; the new Architecture and Design Gallery, prominently situated on the northeastern edge of the facility, should also prove a public draw, as Toronto's only architecture, design and landscape-exclusive exhibition space; and a raised terrace on the south edge of the new building will offer visitors and students alike a breathtaking view down Spadina – a feature that, as Sommer notes, restores the space to its original, pre-seminary existence as a park for wealthy landowners to bask in the view of the lake.

The revamped Spadina Circle is more than just a new home for the Daniels Faculty; it's a new look for the city. "It's more than twice the size of our current building, there's going to be a much greater degree of transparency between one activity and another, and it's going to have a position at the head of a major avenue in Toronto," says Sommer. "It's going to put architecture and urban design and landscape architecture programs literally on the map in Toronto." **A**