

From graduate to structural engineer – a first-person perspective

NZ Construction News recently spoke to Holmes Consulting graduate Laura Schwass about transitioning into full-time employment and her work on the Arts Centre in Christchurch.

Laura Schwass is a 24-year-old graduate who began her tertiary education in architecture before realising that structural engineering was her true calling. In November 2017, Laura got an opportunity to join Holmes Consulting under its graduate and summer recruitment programme and hasn't looked back since.

THE LIFE OF A GRADUATE

Laura applied for the Holmes graduate programme over other internships because of the project opportunities available. It also gave her the opportunity to transition to full-time employment immediately.

Straight away, she found herself getting involved in a variety of projects, including the heritage Hawke's Bay Opera House, as well as the new acute services building at Christchurch Hospital and, soon after, the restoration of the Arts Centre in Christchurch – her dream project.

Laura says that the ability to work on projects from start to finish has been a highlight of the programme. "Seeing how my contributions make a difference to the end result is what I love most about my experience. I can see what I've achieved and feel so proud of my contribution.

"As graduates, we are given a lot of responsibility, but we also receive a lot of support from the outset, both technical and relational."

The graduates, based in both the North and South Islands, were given multiple opportunities to meet in-person and over Skype. The supportive team culture also meant that the graduates could go straight to a technical director for advice.

"To have this level of support in the first few years of my career has been amazing. Everyone is very approachable and there is far less of a sense of hierarchy than you might find in other workplaces. I feel comfortable that I can consult the experts if I'm struggling," says Laura.

Laura is almost two years through the Holmes graduate programme which typically lasts for three years.

THE PERFECT PROJECT

The opportunity to work on the Arts Centre in Christchurch was the very reason Laura applied for the Holmes graduate programme. The project involves the seismic strengthening and careful restoration of 23 Category 1 heritage buildings of Gothic Revival architectural style.

"I never imagined a graduate would have the opportunity to work on a project like this. I was blown away to be placed on my dream project six months into the programme. It's been amazing to be so involved and given a good amount of responsibility. When my grandfather asked me what I was working on and I told him that one of the projects was the Arts Centre, he was so impressed. It's such a cool experience to work on a building with a heritage that will last for many, many years," says Laura.

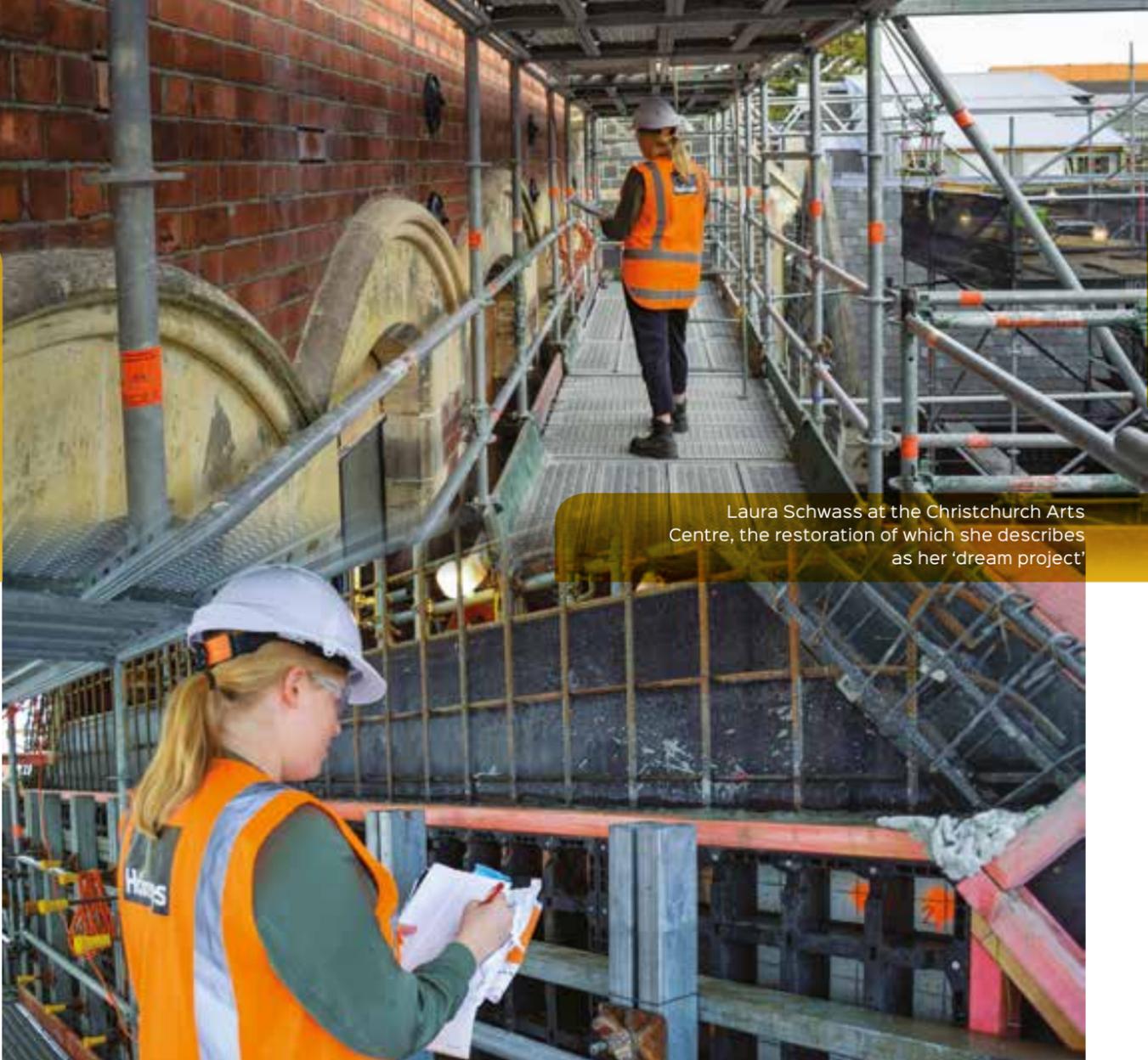
Her role has included assessing the gravity structure of the building and designing diaphragms and other seismic structure elements. She has also worked on a lift shaft in the building and a new section of roofing.

Perhaps the most exciting element of Laura's involvement, however, has been the assessment of some existing timber stairs with the task of figuring out how best to keep the heritage of such a complex part of the structure. The process required extensive consultation with architects, heritage experts and the client to find a solution that would work for everyone.

"The things I loved the most about this project were the client interactions and the collaboration opportunities with other designers. Coming out of university, I thought I'd mainly work on technical analysis, but I've really enjoyed the 'people' side of things which is a huge, but quite unspoken, part of the job."

ADVICE TO OTHER GRADUATES

Laura explains that developing good communication skills and resilience during your tertiary years is paramount. "You might learn the technical skills at university and be told that they are the most important, but the reality is that you'll be working with clients frequently, and will be



Laura Schwass at the Christchurch Arts Centre, the restoration of which she describes as her 'dream project'

required to build trusting relationships and communicate your recommendations effectively."

Building a good working relationship with everyone in the team can make or break a project, adds Laura. "Everyone comes from

a different background, so being able to listen to others' point of view is important, even when it differs from your own.

"I came out of university thinking I had learnt everything that I needed to know. This kind of optimism

helped me dive right in, but while I did have a good handle on design concepts, I've learnt a lot of the specifics on the job, often by drawing on the expertise of others."

So, what makes a great structural engineer? Laura says that the four most important attributes to possess are openness to other opinions, perseverance, creativity and resilience. In her two years at Holmes, Laura has seen these qualities in all the top professionals.



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Finalists announced for NAWIC Excellence Awards

The National Association of Women in Construction NZ (NAWIC) is delighted to have received a significant increase in entry numbers for their fifth annual Excellence Awards, this year in partnership with BCITO.

"We are both humbled and inspired by the extremely high quality of entries we've received," says awards convenor Stacey Mendonca. "It's wonderful to be able to celebrate and acknowledge some of our top women working in the New Zealand building and construction industry."

NAWIC president Jenny Parker says they are very much looking forward to celebrating the finalists' achievements, and sharing their incredible stories with the wider industry. "As the list of finalists shows, women are positively impacting all aspects of our industry. The finalists' own organisations, communities and whanau



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BCITO chief executive Warwick Quinn says: "The NAWIC Excellence Awards are a testament to the strong dedication and work ethic of all women in construction, and a fitting way to celebrate just a few of their achievements. We are proud to partner with NAWIC for this initiative. For everyone at BCITO, sharing the recognition of high achievers makes everything we do so worthwhile. Congratulations to all finalists."

The event confirming this year's winners will be held at the Royal New Zealand Yacht Squadron in Auckland on Friday 27 September. A full list of finalists and tickets for the event are now available via the NAWIC website.

nawic.org.nz