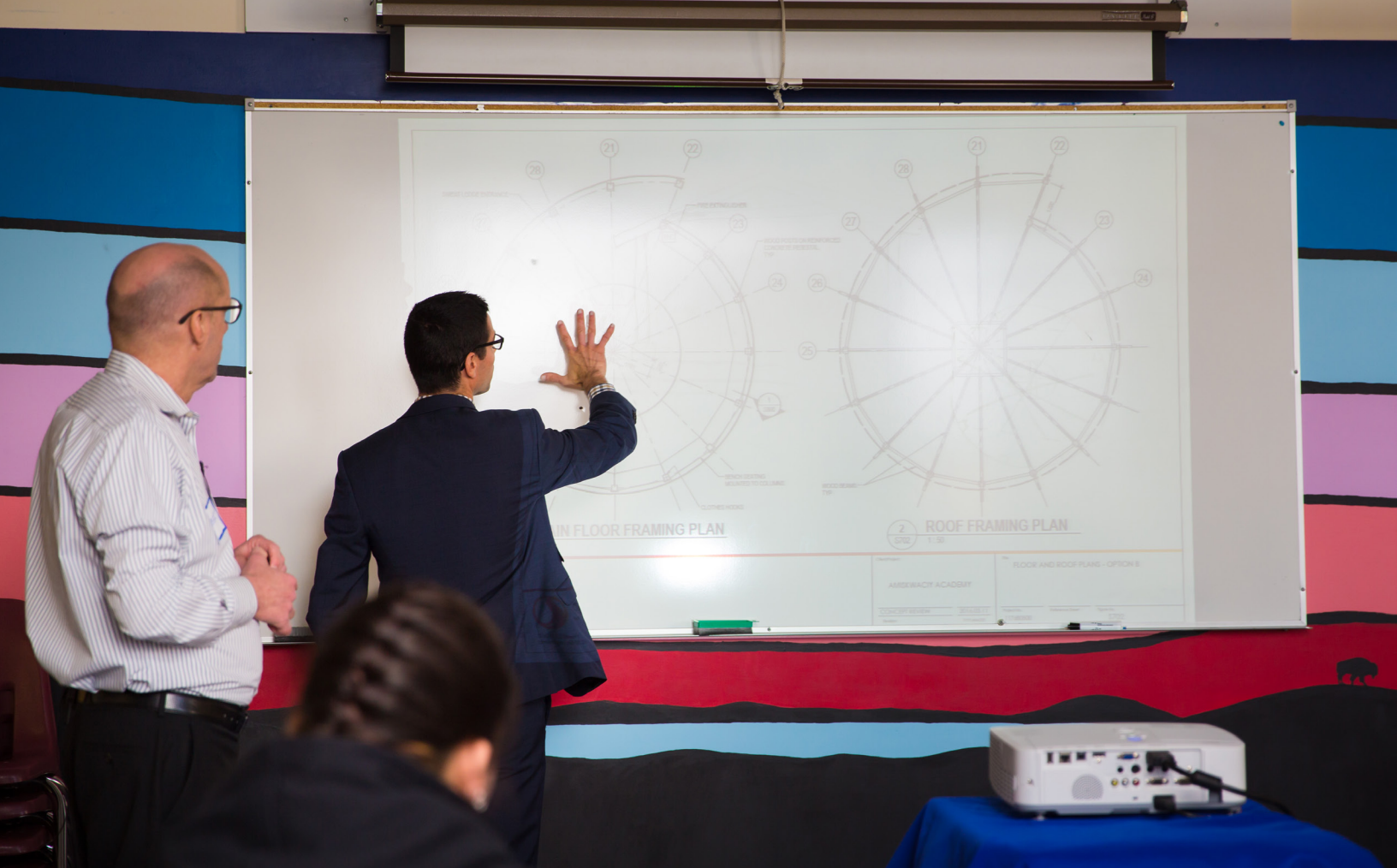




amiskwaciy Academy Sweat Lodge 2016

Canadian Consulting Engineering Awards
Community Outreach and In-house Initiatives



3. Full Project Description

Q.16 Nature of the project

Elders and staff at amiskwaciy Academy—an Edmonton Public School that provides academic programming within an Aboriginal context—had a vision: they wanted to have a traditional sweat lodge built on school property where traditional ceremonies, teachings, and rituals could be performed. But they knew they couldn't build a sweat lodge without a protective structure to provide shelter against the elements and for privacy.

That's when they turned to Stantec for help. We recognized the uniqueness of this opportunity and seized the chance to get involved. Ledcor Construction later agreed to join the initiative as the constructor, helping make the vision a reality.

Stantec's Robert Bourdages and Frederic Brisson began working on the design in early 2016, and sought input through consultation sessions with amiskwaciy Elders, staff, and students. The goal was to design an enclosure, through aesthetics and natural construction materials, that captured the essence of the sweat lodge itself: a traditional space for mental, spiritual, and physical refuge.

When the design was complete, Frederic and Robert presented the drawings to students, explaining the steps and considerations involved in arriving at their design decisions. Throughout construction, Ledcor worked with students onsite, providing them with both hands-on construction experience while deepening their personal connection to the project.

Construction of the sweat lodge and shelter began on Stantec's volunteer day, Stantec in the Community Day, on September 21, 2016 that saw 20-plus Stantec staff roll up their sleeves alongside amiskwaciy staff and students. Its official grand opening took place on Friday, November 18, 2016.

This collaborative community project—the first traditional sweat lodge on school property within the Edmonton Public School Board District—was an exchange of technical knowledge and culture across groups, combining the traditional insight and guidance of school Elders and students, the design expertise of Stantec's Robert Bourdages and Frederic Brisson, Ledcor's top-notch carpentry and construction services, and the generous contributions of several suppliers.

There is a consensus among partners that the level of coordination and cooperation seen throughout this project is an example to live by, with everyone focused on the end goal and the difference this structure would make to its community. Stakeholders pooled resources, pulled together, and learned from one another. They combined forces to get the job done. This project is the definition of a community project, and one which will serve amiskwaciy Academy, and the broader community, for years to come.



Q.17 Effort and Complexity

Stantec welcomed the opportunity to partner on this unique community project. The lead architect and engineer quickly recognized that building a traditional structure using contemporary technology would be challenging. Once the essence and purpose of the sweat lodge itself were understood, we knew that the right design would have to reflect those elements. A circular, wooden shelter was identified as the right approach after extensive consultation with school Elders, staff, and students, as both elements are central to Indigenous culture. In the end, a customized design was presented that used wood for the structure and steel to anchor it. The sweat lodge itself was built by the Elders using centuries-old traditional construction techniques with bent willows trunks to create arches supporting a canvas covering the sweat lodge. To allow the willow arches to be planted and remain in place in 18-inches of soil that sits on a concrete tarmac formerly used for an airport, Stantec designed custom steel anchors to fix the willow in place. Our design team produced a set of construction documents that were handed over to Ledcor who volunteered their time and resources to build the structure. All of the work was done as an in-kind donation.

During initial planning, we also used building information modelling (BIM) for viewing with 3D glasses, which enabled the students and staff to visualize the inside of the shelter. Our project leaders consistently met with school staff and collaboratively developed the basis of design. On occasion, we brought together school Elders, staff, and students to share the cultural meaning of the sweat ceremony with our team, equipping us to deliver a design that captured the spirit of the shelter.

Stantec invited more than 20 staff members as part of its annual Community Day celebrations to participate in the beginning of construction along with the contractor, staff, and students. Following that, our design team continued site reviews until the project was completed in November 2016.

The Stantec team shepherded the design through the necessary approvals with the City of Edmonton, and the Edmonton Public School Board. The project also wasn't without its construction challenges. It's not often that one builds a completely circular structure—nor one made exclusively of wood, for that matter. The Ledcor crew had ongoing discussions with Robert and Frederic as they worked together to navigate some of these project obstacles. And the end result speaks for itself.



“I’m so proud of this project, of the work we’ve all done together, and the teaching and learning that was part of this experience for all of us. With its completion, we have fulfilled the vision of our founding elders to have a ceremonial site on our school’s property. I now have a place to perform sacred traditional ceremonies, which will help rebuild self-esteem for our students, and enable healing for our community.”

–Elder Francis Whiskeyjack



Q.18 Social, Economic, and Other Benefits

Given the limited financial resources available to bring this project to fruition, Stantec donated countless hours to help amiskwaciy Academy achieve their dream of having an authentic, outdoor sweat lodge with a protective shelter on school property. We are proud to have contributed to creating a space where Elder Francis Whiskeyjack can perform traditional ceremonies, rituals, and teachings, and educate the students and the public about its meaning and significance. Since its opening, both students and community members have had the chance to experience a traditional sweat, including members of the Catholic School Board, the RCMP, and Stantec staff. In the spirit of Truth and Reconciliation, this collaborative project has bridged a gap, bringing together diverse organizations and members of the community in the spirit of learning, cultural exchange and respect, and acceptance.

The ceremony allows participants to come together in a tranquil space that allows for personal reflection; it cultivates a sense of community for participants about to go through an emotional journey while being surrounded by others for reassurance. It also brings together members of the Indigenous community to connect with an important part of their spiritual tradition. The building is small in footprint, but is an invaluable teaching tool for the students and the community at large.

By providing technical support, final drawings, permitting assistance, and administrative support, we demonstrated our commitment both to the Academy and to the Indigenous community as a whole. It is only after being invited to participate in a sweat ceremony, and experiencing it in person, did our team members at Stantec understand the purpose of the ceremony—its physical, emotional, and spiritual meaning made us all appreciate our contributions to this pivotal community project.

This is a special collaboration between our Indigenous communities, the public sector and the private sector which has paved the way for a unique exchange of culture and technical knowledge. We, as engineers and architects, enjoyed the benefit of learning more about Indigenous culture, tradition, and teachings.

And, along with Ledcor, we were able to teach these students a bit about what's involved in designing and building a structure like this.

This project has enhanced the traditional learning experience of amiskwaciy students and the broader community. It is making a difference in lives today, and will do so for many years to come.

“The fundamental spirit of partnership, community, and cooperation between our organizations is the driving force behind this project’s success. The relationships we have cultivated over these past months will endure long into the future. We’re grateful to amiskwaciy Academy for giving us the opportunity to contribute to a project so meaningful to the community, and to Ledcor for helping us bring this vision to life.”

–Keith Shillington, Senior VP, Stantec





“We are honoured to have been involved in a project as unique and rare as this one, and delighted to have been able to work together with amiskwaciy Academy, Stantec, and our suppliers to see it through to completion,” says Scott Murchison, special projects manager at Ledcor. “For Ledcor, the most rewarding projects are those that reflect our core values, and allow us to partner with other community-minded organizations to leave lasting, positive impact on our community.”