



abbotsford senior secondary school

0990

client

School District No. 34
(Abbotsford)

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location

Abbotsford

size

8,000 m² renovation (86,114 ft²)

value

\$50 million

status

Complete September 2012

key Features

LEED Gold/Sustainable

Fosters a connection to its
surroundings

Value for Money/Life-cycle
approach

Stakeholder engagement

**a revitalized place
for learning**
exemplifying sustainability
for future generations



recreating the hub

With the City of Abbotsford heading into an era of exciting growth and requiring a revitalization of their existing Abbotsford Senior Secondary School (ASSS), Station One Architects was delighted to design a LEED Gold building by replacing the existing structure with upgraded and renovated newer portions in the heart of the city. This was done reusing parts of the existing structure while employing the life-cycle approach to design, such as utilizing high quality materials and construction to maximize the return of the entire project. Gathering the city around this structure through the

joining of ASSS, Abbotsford Community Library, and the Sweeney Neighbourhood Centre has resulted in a wider function of the space while embracing the entire community. ASSS offers inviting and bright gathering pockets, pull-out spaces, and corridor seating areas to facilitate learning and social breakouts of various sizes and styles, with locations throughout the facility. Creative openings connect these spaces, enabling instruction in 21st Century teaching methods, and the flexibility to adapt to future changes.

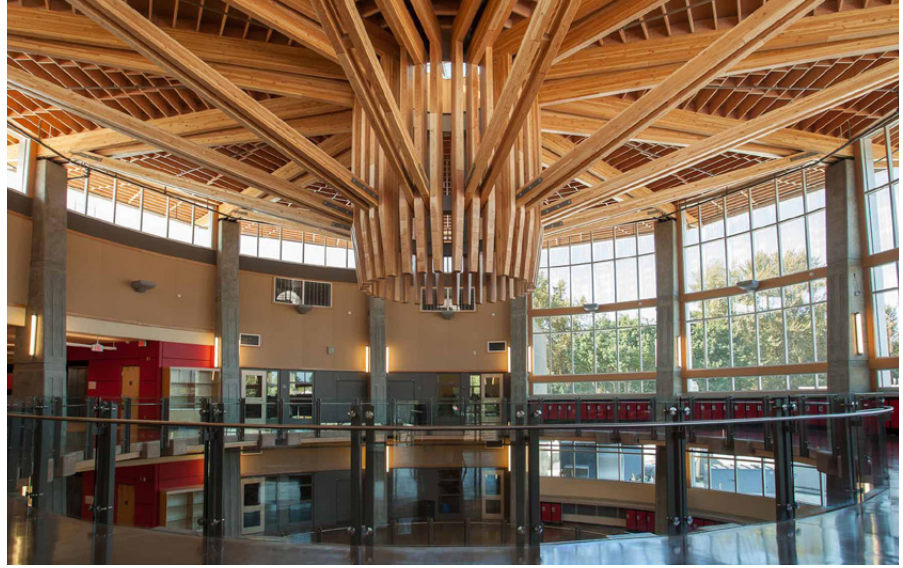
collaboration and celebration

City officials and School District staff partnered to add the Sweeney Neighbourhood of Learning Centre as part of the new school. A key to revitalizing the downtown core, this partnership engaged numerous civic, community, school and neighbourhood learning centre stakeholders. During the process, a sense of ownership and relevance for the school, as well as the needs of the community, were established.



adaptive instruction

A science super lab, a 'guide from the side' computer lab, vocational facilities, a successful, collaborating learning environment, including wood shops, hairdressing studio, and a teaching kitchen allow for more in-depth and specialized teaching, preparing students for real-life application. Links between rooms accommodate teacher and student collaboration, while overhead doors and adjacent multi-purpose space extend the classroom beyond traditional walls.



- Exposed wood and steelwork
- Low-VOC paints
- Low-flow water fixtures
- Recycled material content in floor coverings and furnishings
- Green roof and high albedo roof surfaces
- Extensive daylighting and natural ventilation
- All glulam beams salvaged from the original demolished building reused as seating in the new facility
- Reclaimed timbers used for benches in rotunda
- Natural lighting used extensively
- Solar shades over windows
- Inviting landscaping that draws the community in

beyond the classroom

Inviting, bright gathering pockets, pull-out spaces, and corridor seating areas facilitate learning and social break-outs of various sizes, styles, and locations throughout the facility. Creative openings connect these spaces with teaching opportunities - enabling instruction in 21st Century teaching methods, and the flexibility to adapt to future changes.

Wide corridors allow ease of flow, enabling accessibility for all students, including those with physical limitations. Compelling colours, materials, and textures were selected to create interesting teaching spaces, inspiring students. Acoustics were addressed to enable conversation and thought to coexist beyond the traditional classroom. Digital presentation centres and learning kiosks educate students on the geothermal and green initiatives at gathering locations.

Architecturally, the building radiates from the school's central cohesive context, a three-storey cast-in-place

concrete, steel, glass, and wood rotunda. This inspirational, finely detailed, wood-roofed structure provides a bright programmatic focal point, with corridors and communal spaces radiating concentrically.

Exposed concrete walls, columns, and cantilevered coloured concrete ring slabs with glass railings create an interesting play on light to the space. In concert with BC's Wood First Act, significant amounts of wood are featured with glulam beams and purlins, timber decking for the roof, exterior heavy-timber loggia, accent beams, while wood panels and grids are used throughout the building. The three-storey structure was constructed of wood framing.

sustainability in action

The new ASSS is energy efficient in all respects. Incorporating a life-cycle approach (i.e., high-quality materials and construction to maximize return), the project includes the following sustainability features:

- Natural material selection, including stained and natural concrete floors

beyond the gold standard

Surpassing Abbotsford School District's goal, achievement of LEED Gold Certification and going beyond provided a valuable example to the students and community in sustainability and appropriate use of materials, systems, and building elements.

Direct teaching tools in which all LEED and green systems used are replicated and explained for the students and public include a unique stand-alone classroom built completely within and around the geothermal/mechanical plant, plus digital presentation centres and learning kiosks at gathering locations throughout the school.

gathering community

The joining of ASSS, Abbotsford Community Library, and the Sweeney Neighborhood Learning Centre has resulted in resources being more efficiently utilized and the community drawn together. Various members of community were consulted in naming the school, library, learning centre, playing fields, and even the art pieces that celebrate the uniqueness of the area.