



# BC Children's and Women's Hospital & Health Centre Phase 2 Redevelopment Project

## CLIENT

BC Children's and Women's Hospital & Health Centre

## LOCATION

Vancouver, British Columbia

## PROJECT DESCRIPTION

BC Children's and Women's Hospital & Health Centre are provincial resources for the coordination and delivery of a comprehensive range of specialized patient-care services for newborns, children and youth, with severe and complex illnesses.

Through the Provincial Health Services Authority (PHSA), BC Children's and Women's Hospital & Health Centre undertook a redevelopment project to ensure capacity could meet the needs of a growing population while providing facilities that support a 21<sup>st</sup> century health care project. Phase 2 of the P3 scope covered the design, construction, financing and facilities management for the newly constructed Teck Acute Care Centre (TACC) at BC Children's and Women's Hospital & Health Centre in Vancouver. This new state-of-the-art 640,000 sq. ft., 10-storey facility houses 241 single patient rooms, 81 out-patient beds, and new space for emergency, oncology, birthing, surgical departments clinical education and research.

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## B&M SCOPE OF WORK

Construction of the TACC was completed in July 2017. Black & McDonald (B&M) worked with its joint venture partners from 2014 onwards to be actively involved in reviewing the design and construction for operational preparations. This included working with the design-build team to ensure frequently serviced mechanical and electrical equipment would be accessible without having to access procedure or patient rooms.

B&M is the FM service provider for the hospital. In this role, the FM service includes provision of all plant services and help desk services, including preventive maintenance, lifecycle management, tenant requests, tenant improvements, and project management.

## BENEFITS TO CLIENTS AND PROBLEMS SOLVED

For each aspect of work delivered within this varied agreement, B&M was conscious of CSA regulations and worked within the protocols of PHSA and the respective hospitals to effectively manage infection control at all stages. B&M worked with the PHSA to develop necessary plans and systems to prevent infection during B&M's operations.

## INNOVATIVE PROCESS AND TECHNOLOGY USED

The BC Children's and Women's Hospital & Health Centre's mechanical & electrical design is based upon equipment strategies for energy use reduction. For the building to achieve the energy model, high efficiency and heat recovery chillers were used, as well as air-to-water heat pumps that capture waste heat and return it for use within the building. The facility design has implemented load-reduction strategies such as high-efficiency LED lighting systems, and high performance walls and glazing. TACC is an environmentally LEED Gold certified facility and supports a safe and healthy work environment for patients and staff. The building operators have access to real time operating data with energy parameters set to indicate when usage falls outside of predicated ranges. This allows operators to review and address any issues quickly prior to any significant impact on overall energy usage.

