



Managing Building Information to Optimize Lifecycle Performance

Location

Calgary, AB

Project Completion

June 2018

Project Cost

\$53 Million

Client Savings from Analytics:

\$92,200

This four storey facility is made up of 200,000 square feet of space above a 45,000 square foot underground parkade featuring 98 parking stalls. Bethany Riverview will become home to 210 residents, housing 90 complex dementia care and 118 long term care resident rooms as well as one bariatric resident room on the third and fourth floor.

Innovation at work

- Analytics identified several Rooftop Unit air handling units not responding correctly to calls for heating. The Contractors attended site to troubleshoot the issues which were solved allowing the equipment to function as intended.
- Equipment air filter pressure drops were flagged by analytics as being dirty. As a consequence variable speed fans will often run at higher speeds to compensate for this. Wasted energy is now being prevented as technicians have replaced many of the dirty filters.

- Monitoring the operation of air handling unit fan drives allowed analytics rules to flag units which were not operational. Once investigated it was discovered that the drives had not been properly commissioned and were unable to run.

Technicians rectified these issues resulting in the overall building comfort by ensuring the building remains positive pressurized and prevents cold outside air from migrating into the space.

- Analytics rules applied to the heat exchanger indicated the system was not supplying heat at the correct temperature. Further investigation revealed manual isolation valves were in the closed position as well as circulation pumps overridden to off at the local control panel. This was rectified and heating performance returned to expected levels.
- Analytics monitored laundry dryers indicated an issue with lint traps and run status points. Run status would falsely indicate a dryer was running in addition to the units tripping on a door switch and stop. Monitoring the equipment allowed us to ensure vital equipment remained functional.

Annual operational savings realized through
Stuart Olson Building Analytics

\$109,326

Value does not include additional cost savings on energy consumption resulting from equipment & systems running optimally