







PHOTO CREDIT: Ledcor Group



## SOUTHGATE CENTRE SEARS REDEVELOPMENT

## **ABOUT THIS PROJECT**

- + Demolition and expansion of former Sears department store to include commercial retail unit (CRU) shells and a large three-story atrium.
- + Space is designed with a flexible layout for various pop-up shops and a seating area that doubles as an amphitheatre to the lower level.
- + Project scope included a building management systems integration with the existing system, the refurbishment of an existing sanitary lift station (basin was repaired and new equipment was installed), and the addition of a domestic water booster system.
- + Renovation doubled the capacity allowances of the plant for future cooling towers, boilers, and heat exchangers.
- + Tenant heating and cooling is provided through a heat pump system centrally located in a mechanical penthouse.
- + Heating and cooling system consists of an adiabatic cooling tower, high-efficiency condensing boilers, pumps, and heat exchangers.
- + Hydronic piping is networked throughout the building to supply water to the individual heat pumps located in each CRUs.
- + Standardizing layouts for the heat pump systems resulted in modular systems that provided cooling at 350sq.ft./ton. Flexible systems can be relocated and/or added to as leasing agreements evolve.
- + Isolation valves were added at intervals along the supply and return mains on each level to minimize downtime and draining on future modifications.
- + CRU ventilation is provided by central dedicated outdoor air systems with heat recovery. Fresh air is pulled into variable air volume boxes and circulated back to the units through a heat wheel.
- + Each tenant exhaust is ducted to a central exhaust fan located on the roof.
- + Mechanical life safety systems include a fire protection system with multiple zones to anchor tenant spaces, an active smoke exhaust system, and fire extinguishers located throughout.

## **HOT BUTTONS**



**LOCATION** Edmonton, AB

SMITH + ANDERSEN SERVICES PROVIDED Mechanical, Electrical

**KEY TEAM MEMBERS** 

Ivanhoe Cambridge Ledcor Group Kasian Architecture JLL Canada

**SIZE** 260,000 sq. ft. (24,154 sq. m.)

BUDGET \$93 Million

COMPLETION YEAR 2022