

RECAPP Facility Evaluation Report

Alberta Health Services-Edmonton



Capital Care - Norwood - CHOICE Day Centre

B0205K
Edmonton

Facility Details	
Building Name:	Capital Care - Norwood - CF
Address:	10404- 111 Avenue
Location:	Edmonton
Building Id:	B0205K
Gross Area (sq. m):	1,219.00
Replacement Cost:	\$4,029,862
Construction Year:	0

Evaluation Details	
Evaluation Company:	Bacz Engineering Ltd.
Evaluation Date:	November 25 2013
Evaluator Name:	Eric Lumley

Total Maintenance Events Next 5 years:	\$347,000
5 year Facility Condition Index (FCI):	8.61%

General Summary:

The building was constructed in 1996 and has concrete foundations, load bearing wood stud exterior and interior walls, wood roof trusses with asphalt shingles and SBS roofing. The windows are fiberglass, double glazed and have fabric roller blinds. There are aluminum entrance screens. The interior is painted drywall stud partitions with painted drywall ceilings and T-bar ceilings. The entrance has porcelain floor tiles and the remainder of the building is sheet vinyl. Patient rooms have moveable drapes. There is a wooden handrail to all corridors.

The building is generally in acceptable condition.

Structural Summary:

The building has loadbearing wood stud walls on concrete grade beams on piles and strip footings. The roof structure is wood roof trusses.

The structure is generally in acceptable condition.

Envelope Summary:

The exterior walls are brick or stucco with cavity insulation and a wood stud back-up wall. There is a vapour barrier on wood sheathing on the cavity side of the studs. The windows are double glazed fiberglass. The roofing is predominantly asphalt shingles on sheathing on wood roof trusses. There are some flat roof areas with SBS roofing.

The building envelope is generally in acceptable condition.

Interior Summary:

The interior partitions are drywall on steel studs, with some loadbearing wood stud walls. Ceilings are painted drywall or T-bar suspended acoustic tile. The flooring is generally sheet vinyl with the entrance being porcelain floor tile.

The interior finishes are generally in acceptable condition.

Mechanical Summary:

Heating system consists of steam piping distribution from Glenrose Hospital plant, pressure reducing station, heat exchangers, hot water glycol distribution and associated pumps and accessories.

Two circulation pumps distribute hot water/glycol to perimeter ceiling radiant panels, finned tube radiation, reheat coils and force flow heaters.

Cooling is provided by two outdoor condensing units complete with refrigerant piping to AHU's DX coils.

Domestic hot water is generated by one steam heated immersion heat exchanger complete with hot water recirculation system.

Conventional plumbing fixtures throughout the facility.

Fire protection is provided in the form of wet sprinkler system, fire extinguishers and fire department connections.

Control system is a Automatic Controls digital programmable BMCS.

Overall mechanical system is in acceptable condition.

Electrical Summary:

The normal power service is 600V 250A fed from main electrical distribution in Angus McGugan Pavilion; the emergency power service is 100A 120/208V fed from Norwood north building CDP-2.

The fluorescent lights are all T-8 lamp with electronic ballasts, the incandescent pendant lights are installed in multi purpose room and wall sconces are installed in the hallways.

The fire alarm and nurse call systems meet current facility operation requirements; telephone, data and PA system

tied to main systems in Angus McGugan Pavilion.

The overall rating for electrical systems is "Good".

Rating Guide	
Condition Rating	Performance
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S1 STRUCTURAL**A1010 Standard Foundations***

Cast in place concrete grade beams on concrete pile foundations

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

A1030 Slab on Grade*

Reinforced concrete slab on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

A2020 Basement Walls (& Crawl Space)*

Cast in place concrete foundation walls on strip footings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B1010.01 Floor Structural Frame (Building Frame)*

The floor over the basement area is a concrete slab on steel deck on OWSJ.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B1010.02 Structural Interior Walls Supporting Floors (or Roof)*

Loadbearing wood stud walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B1020.01 Roof Structural Frame*

Built up wood columns which support wood beams which support the roof trusses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B1020.01.03 Roof Trusses

Engineered wood trusses

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

S2 ENVELOPE**B2010.01.02.01 Brick Masonry: Ext. Wall Skin***

Facing brick veneer dado around the building up to window sill height.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B2010.01.11 Joint Sealers (caulking): Ext. Wall**

Caulking around all windows and doors.
Caulking will reach it's design life in 2016.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Replace Caulking.- (B.O.E. 415 m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$12,000	Unassigned

Updated: MAR-14

B2010.01.99 Other Exterior Wall Skin*

Coloured acrylic stucco from the facing brick band to the underside of the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B2010.03 Exterior Wall Vapour Retarders, Air Barriers, and Insulation*

The exterior wall cavity has 50mm rigid insulation and a vapour barrier on exterior OSB sheathing. Window assemblies are foam insulated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B2010.04 Exterior Wall Interior Skin*

Painted drywall .

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows**

Fibreglass fixed windows with sealed double glazing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	40	MAR-14

Event: Replace Fibreglass Windows.- (B.O.E. 115 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$106,000	Unassigned

Updated: MAR-14

B2030.01.06 Automatic Entrance Doors**

Automatic aluminum sliding double doors at main entrance and inner vestibule.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace Automatic Entrance Doors.- (B.O.E. 2 sets double doors.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$40,500	Unassigned

Updated: MAR-14

B2030.02.01 Metal Doors and Frames

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

B3010.02.01.01 Asphalt Shingles**

Asphalt shingles to sloped portions of roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1996	25	MAR-14

Event: Replace asphalt shingles.- (B.O.E. 850 sq.m.)

Concern:

Shingles on the south exposure curls up.

Recommendation:

Replace asphalt shingles.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$85,000	Medium

Updated: MAR-14

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)**

SBS roofing membrane to flat portions of roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	25	MAR-14

Event: Replace SBS Roofing.- (B.O.E. 498 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$90,000	Unassigned

Updated: MAR-14

B3010.08.02 Metal Gutters and Downspouts**

Metal gutters and downspouts to perimeter of all sloped roof areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace Metal Gutters and Downspouts.- (B.O.E. 200m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$5,000	Unassigned

Updated: MAR-14

S3 INTERIOR**C1020.01 Interior Swinging Doors (& Hardware)***

Painted solid core wood doors and metal doors in pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

C1030.01 Visual Display Boards**

Variety of whiteboards and tackboards throughout the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Visual Display Boards.- (B.O.E. 20 units)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$13,000	Unassigned

Updated: MAR-14

C1030.06 Handrails*

Wood handrails throughout the corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

C1030.10 Lockers**

Full height lockers in locker room and laundry.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace Lockers.- (B.O.E. 35 lockers)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$17,000	Unassigned

Updated: MAR-14

C1030.14 Toilet, Bath, and Laundry Accessories*

Toilet roll dispensers, mirrors, soap dispensers,waste bins, grab bars.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

C3010.02 Wall Paneling**

Wood dado and wall protections rail and base in corridors and multipurpose areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace Wall Paneling.- (B.O.E. 204 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$23,000	Unassigned

Updated: MAR-14

C3010.11 Interior Wall Painting*

Paint finish to gypsum board throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1996	0	MAR-14

Event: Repair gypsum board and repaint.- (B.O.E. 4 locations.)**Concern:**

Several areas are damaged due to moisture penetration (leaks) or structural movement.

Recommendation:

Repair and repaint.

Consequences of Deferral:

Damage will continue to be unsightly.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2014	\$15,000	Low

Updated: MAR-14

C3020.02 Tile Floor Finishes**

Porcelain floor tile in main entrance lobby.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	50	MAR-14

Event: Replace Porcelain Tile Floor Finish.- (B.O.E.97 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2046	\$27,000	Unassigned

Updated: MAR-14

C3020.07 Resilient Flooring**

Sheet vinyl floor throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Replace sheet vinyl flooring.- (B.O.E. 1410 sq.m.)

Concern:

Sheet vinyl flooring will reach it's design life in 2016.

Recommendation:

Replace flooring.

Consequences of Deferral:

Citations by Public Health. Increased operational costs from extra chemicals and labor required to meet minimum standards.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$113,000	Low

Updated: MAR-14

C3030.06 Acoustic Ceiling Treatment (Susp. T-Bar)**

T-bar ceilings in all areas except washrooms, locker areas, storage rooms, main entrance and kitchen areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	25	MAR-14

Event: Replace Acoustic Ceiling Treatment.- (Susp. T-Bar). B.O.E. 1187 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$56,000	Unassigned

Updated: MAR-14

C3030.07 Interior Ceiling Painting*

Painted drywall ceilings in washrooms, locker areas, storage rooms, main entrance, kitchen and foods areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1996	0	MAR-14

Event: Repair Interior Ceiling and Repaint.- (B.O.E. 4 locations.)

Concern:

Painted ceilings are damaged due to leaks and building movement.

Recommendation:

Repair and repaint damaged ceilings.

Consequences of Deferral:

Ceilings will continue to be unsightly.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2014	\$10,000	Low

Updated: MAR-14

D1010.01.02 Hydraulic Passenger Elevators**

Hydraulic elevator between basement and 1st floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Refurbish Elevator.- (B.O.E. 1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$88,000	Unassigned

Updated: MAR-14

S4 MECHANICAL**D2010.04 Sinks****

Variety of sinks provided throughout the building. The sinks are the following type:

- general purpose stainless steel sinks, single and double compartment
- enameled steel shampoo sinks
- fiberglass floor mounted mop sinks

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 18 Sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$27,000	Unassigned

Updated: MAR-14

D2010.05 Showers**

Shower stalls have architectural finishes, formed bases and ceramic tiled walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 2 Showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$6,000	Unassigned

Updated: MAR-14

D2010.06 Bathtubs**

Assisted bath tubs located in Bathing Rooms, complete with automatic lift, thermoscopic mixing valve

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 1 Bathtub.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$30,000	Unassigned

Updated: MAR-14

D2010.10 Washroom Fixtures (WC, Lav, Urnl)**

WC - water closets - floor mounted, vitreous china, elongated bowl, open front seat, flush tank.
 LAV -lavatories - wall mounted, vitreous china lavatories and counter mounted enameled steel lavatories, lever blades faucets.
 UR - urinal - wall mounted vitreous china flush valve urinal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	35	MAR-14

Event: Replace 19 Washroom Fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$29,000	Unassigned

Updated: MAR-14

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping distribution throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D2020.01.02 Valves: Domestic Water**

The domestic water distribution system piping includes isolation valves for fixtures and piping branches. Isolation valves are typically brass or bronze gate type valves. Central mixing valve serving domestic hot water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	40	MAR-14

Event: Replace 40 Valves.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$12,000	Unassigned

Updated: MAR-14

D2020.01.03 Piping Specialties (Backflow Preventers)**

There are pressure reducing valves on the make-up water supplies to the building HVAC equipment and fire protection systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Replace 3 Backflow Preventors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$12,000	Unassigned

Updated: MAR-14

D2020.02.02 Plumbing Pumps: Domestic Water**

There is one domestic hot water recirculation pump in the mechanical room, Taco model 1611B, 1.27 lps at 66kPa.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Replace 1 DHWR Pump.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$2,000	Unassigned

Updated: MAR-14

D2020.02.06 Domestic Water Heaters**

Domestic hot water is produced by steam heated immersion exchanger located in mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Replace 1 Domestic Hot Water Heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$30,000	Unassigned

Updated: MAR-14

D2020.03 Water Supply Insulation: Domestic*

Insulation, where exposed for domestic hot and cold water is fiberglass with a canvas jacket.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D2030.01 Waste and Vent Piping*

150mm sanitary sewer main leaves the south face of the building and connects to the municipal system. Waste and vent piping is ABS and PVC.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D2030.02.04 Floor Drains*

Cast iron floor and hub drains located throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D2030.03 Waste Piping Equipment*

Sump complete with duplex submersible pumps serving weeping tile system.
 Sump complete with single pumps serving elevator shaft.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D2040.01 Rain Water Drainage Piping Systems*

Storm piping risers are provided to collect roof drainage system. Risers connect to 200mm storm main exiting the south face of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D2040.02.04 Roof Drains*

Cast iron roof drains serving flat roofs,

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D3030.06.02 Refrigerant Condensing Units**

Two condensing units are provided to provide cooling to DX coils serving AHU-1 and AHU-2. Units are located on the flat roof beside penthouse. Units are manufactured by York, model H2CA300A25, 92 kW cooling capacity each.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	25	MAR-14

Event: Replace 2 Condensing Units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$65,000	Unassigned

Updated: MAR-14

D3040.01.01 Air Handling Units: Air Distribution**

There are two air handling units serving building. Air handling units consist of supply air fan section, return air fan section, heating coil, DX cooling coil, air filter, air blender, modulating dampers etc. Air handling unit AHU-1 serving east section of the building is completed with heat recovery section.

AHU-1: Trane model TC-10HR, 40185 lps supply air, 2925 lps return air.

AHU-2: Trane model TC-10, 4560 lps supply air, 4115 lps return air.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 2 Air Handling Units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$240,000	Unassigned

Updated: MAR-14

D3040.01.04 Ducts: Air Distribution*

Galvanized steel, constant volume, overhead ductwork distribution.

Air distribution ducts include the fresh air, supply air, return air and exhaust air duct systems, as applicable, for the air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Air outlets and inlets include supply air diffusers and return air grilles.

Supply air diffusers are square type mounted in the ceiling tile grid, surface mounted air diffusers on drywall ceilings, and wall and ceiling mounted linear bar grilles.

Return air grilles include wall and ceiling mounted grilles, as well as egg crate type grilles in the ceiling grid.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D3040.02 Steam Distribution Systems: Piping/Pumps**

Steam is supplied to the building from the central steam plant located in Glenrose Hospital. Main high pressure steam line passes through moisture separators and meter. Pressure REDUCING STATIONS 863KpA TO 415 KpA AND 415 kPa to 103 kPa. Steam is used in the building to provide hot water and hot glycol for heating via shell and tube type heat exchangers, and for steam humidification. This element includes the steam distribution piping, condensate collection piping, piping insulation, traps, valves, piping specialties, and condensate tanks and pumps. There is steam condensate return system in basement mechanical room (including a condensate tank and duplex condensate return pumps).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	40	MAR-14

Event: Replace Steam Distribution System.- (BOE: 1219 sq.m. GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$110,000	Unassigned

Updated: MAR-14

D3040.03.01 Hot Water Distribution Systems**

Black steel and copper piping distribution in ceiling space to perimeter heating units. 75mm reverse return hot water/glycol loop to mechanical room located in Basement. Hot water heat exchangers, expansion tanks and pumps are all located in basement mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	40	MAR-14

Event: Replace Hot Water Distribution System.- (BOE: 1219 sq.m. GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$130,000	Unassigned

Updated: MAR-14

D3040.04.01 Fans: Exhaust**

Variety of exhaust fans provided throughout the building. Exhaust fans are centrifugal, belt driven type located on roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 5 Exhaust Fans.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$20,000	Unassigned

Updated: MAR-14

D3040.04.03 Ducts: Exhaust*

Building exhaust fans have associated duct systems for the collection of air from single or multiple source locations. Ductwork is galvanized steel construction, low velocity located in ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D3040.05 Heat Exchangers**

Two shell and tube type heat exchangers are located in mechanical room. Heat exchangers are steam to hot water and steam to glycol/water type serving heating piping system and domestic hot water system. LCR cost for DHW system HE is included under section D2020.02.06.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 1 Heat Exchanger.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$30,000	Unassigned

Updated: MAR-14

D3050.02 Air Coils**

Duct mounted hydronic heating coils serving interior spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 5 Reheat Coils.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$20,000	Unassigned

Updated: MAR-14

D3050.05.02 Fan Coil Units**

Wall mounted, recessed hydronic force flow heaters serving building entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace 2 Force Flow Heaters.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$10,000	Unassigned

Updated: MAR-14

D3050.05.03 Finned Tube Radiation**

Perimeter finned tube radiation complete with enclosure serving Multi Purpose Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	40	MAR-14

Event: Replace Finned Tube Radiation.-(BOE: 10 m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$7,000	Unassigned

Updated: MAR-14

D3050.05.08 Radiant Heating (Ceiling & Floor)**

Radiant ceiling panels serving perimeter of the building, 610mm width aluminum linear type, mounted in the T-bar.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	35	MAR-14

Event: Replace Ceiling Radiant Panels.- (BOE: 65 m linear length.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$60,000	Unassigned

Updated: MAR-14

D3060.02.05 Building Systems Controls (BMCS, EMCS)**

Automatic Controls building management control system complete with remote access.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	MAR-14

Event: Replace BMS.- (BOE: 1219 sq.m. GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$45,000	Unassigned

Updated: MAR-14

D4010 Sprinklers: Fire Protection*

The building is sprinklered as per NFPA13. Automatic sprinkler system consists of wet pipes and deluge. Automatic wet pipe sprinkler alarm valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Fire extinguishers provided throughout:- carbon dioxide, multi-purpose dry chemical. All units complete with up-to-date certification tags.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

S5 ELECTRICAL**D5010.02 Secondary Electrical Transform main electrical distribution in Angus McGugan Pavilioners (Interior)****

The indoor 225KVA 600V-120/208V dry type transformer is used to provide power to building normal power service. The transformer is fed from main electrical distribution in Angus McGugan Pavilion

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	40	MAR-14

Event: Replace One Secondary Electrical Transformer

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$5,000	Unassigned

Updated: MAR-14**D5010.03 Main Electrical Switchboards (Main Distribution)****

The central distribution panelboard is 120/208V, 3 phase, 4 wire and rated 800A; the panel board is fed from indoor 225 KVA 600V-120/208V transformer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	40	MAR-14

Event: Replace Main Electrical Switchboards.- (BOE: 1219 m2 GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$24,000	Unassigned

Updated: MAR-14**D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)****

The 7 panels are used for normal power distribution and one panel is used for emergency power distribution. Most of panels have at least 25% space for future uses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	30	MAR-14

Event: Replace 8 Electrical Branch Circuit Panelboards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$40,000	Unassigned

Updated: MAR-14

D5010.07 Motor Control Centers

The MCC is used for mechanical ventilation and pump controls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	30	MAR-14

Event: Replace 3 Sections of MCC

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$21,000	Unassigned

Updated: MAR-14

D5020.01 Electrical Branch Wiring*

All the wires are copper and installed in the conduits

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5020.02.01 Lighting Accessories: Interior (Lighting Controls)*

The line voltage switching is used for lighting controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5020.02.02.01 Interior Incandescent Fixtures*

The pendant lights are used in Multi Purpose Room and common areas; the wall sconces are installed in the hallways. Some of lights are retrofit with self ballast compact fluorescent lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5020.02.02.02 Interior Fluorescent Fixtures**

All the fixtures are T-8 lamps with electronic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	30	MAR-14

Event: Replace 120 Interior Fluorescent Fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$48,000	Unassigned

Updated: MAR-14

D5020.03.01.03 Exterior Metal Halide Fixtures*

The wall packs are installed around building perimeter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5020.03.02 Lighting Accessories: Exterior (Lighting Controls)*

The exterior lighting is controlled by photo cell and timer

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5030.01 Detection and Fire Alarm**

The fully addressable Notifier control panel is used for entire building fire alarm system

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2011	25	MAR-14

Event: Replace Detection and Fire Alarm.- (BOE: 1219 m2 GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$25,000	Unassigned

Updated: MAR-14

D5030.02.03 Security Access**

The Corby Key pads are installed at Exit doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	25	MAR-14

Event: Replace Security Access.- (BOE: 1219 m2 GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$6,000	Unassigned

Updated: MAR-14

D5030.04.01 Telephone Systems*

The office Telephone service is tied to Nortel Meridian located in Angus McGugan Pavilion.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5030.04.03 Call Systems**

The Dukane nurse call system is installed and have pull chain stations installed in the wash rooms and indicate lights on the ceiling outside wash rooms. The annunciator at the Nurse Station.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	25	MAR-14

Event: Replace Nurse Call Systems.- (BOE: 1219 m2 GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$10,000	Unassigned

Updated: MAR-14

D5030.04.04 Data Systems*

The data switch and hub rack is tied to Angus McGugan Pavilion by fiber and data outlets are installed in the offices and nurse stations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

D5030.05 Public Address and Music Systems**

The public address speakers are installed through building hallways and tied to main amplifier in Angus McGugan Pavilion to serve the North Pavilion; paging is accessible from McGugan and the North Pavilion at nurses stations through the telephone sets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	20	MAR-14

Event: Replace PA Speakers.- (BOE: 1219 m2 GFA.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$10,000	Unassigned

Updated: MAR-14

D5030.06 Television Systems*

Cable television outlets are common lounges.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	0	MAR-14

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1020.08.02 Examination and Treatment Equipment**

Medical and treatment equipment provided in examination and treatment rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

E2010.02 Fixed Casework**

Fixed cabinets and upper cupboards provided in kitchen. Open storage shelving provided in storage rooms. Display case in main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	35	MAR-14

Event: Replace millwork.- (B.O.E. 95m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2031	\$104,500	Unassigned

Updated: MAR-14

E2010.03.01 Blinds**

Perforated fabric roller blinds provided to all exterior windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	MAR-14

Event: Replace Blinds.- (B.O.E. 115 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$15,000	Unassigned

Updated: MAR-14

S8 SPECIAL ASSESSMENT**K4010.01 Barrier Free Route: Parking to Entrance***

Barrier free route from parking to main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

K4010.02 Barrier Free Entrances*

Automatic sliding doors at main entrance and vestibule.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

K4010.03 Barrier Free Interior Circulation*

Circulation is on one level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

K4010.04 Barrier Free Washrooms*

Barrier free washrooms provided throughout the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

K4030.01 Asbestos*

No asbestos noted or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

K4030.04 Mould*

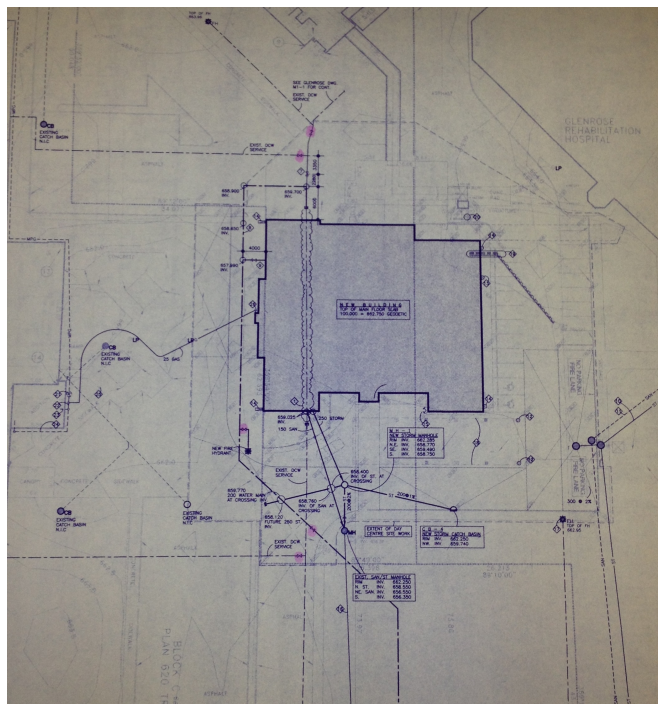
No mould noted or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	0	MAR-14

K5010.01 Site Documentation*

Prime Consultant: Bacz Engineering Ltd.
 Year of Evaluation: 2013
 Building Area Evaluated: 1219 m2

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2013	0	MAR-14

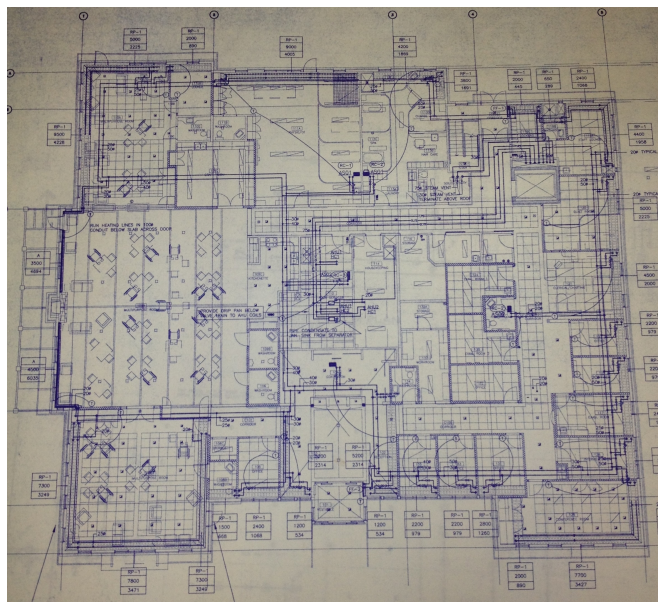


Site Plan

K5010.02 Building Documentation*

The building was constructed in 1996 and has concrete foundations, load bearing wood stud exterior and interior walls, wood roof trusses with asphalt shingles and SBS roofing

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2013	0	MAR-14



Main Floor Plan