

# RECAPP Facility Evaluation Report

Alberta Health Services-Edmonton



**Roger Parker Pavillion**

B1041B  
Edmonton

**Facility Details**

**Building Name:** Roger Parker Pavillion  
**Address:** 8740 - 165 Street  
**Location:** Edmonton

**Building Id:** B1041B  
**Gross Area (sq. m):** 11,260.00  
**Replacement Cost:** \$38,628,838  
**Construction Year:** 0

**Evaluation Details**

**Evaluation Company:** BACZ Engineering (2004) Ltd  
**Evaluation Date:** October 4 2012  
**Evaluator Name:** Eric Lumley

**Total Maintenance Events Next 5 years:** \$7,442,800  
**5 year Facility Condition Index (FCI):** 19.27%

**General Summary:**

Constructed in 1978, the building has four levels has an exposed aggregate precast concrete panel facade with SBS roofing and aluminum windows. The corridor walls are giant brick, the ceilings are T-bar and painted gypsum board. The main floor has a terrazzo floor finish, other floors are resilient sheet flooring. There are curved aluminum solariums at each floor level. The total area of the building is 11260 sq.m.

**Structural Summary:**

Concrete columns and beams with cast-in-place floor slabs. Concrete pad and pile foundations.

**Envelope Summary:**

Precast concrete panel exterior with famed inner stud wythe, c/w insulation and polyethylene vapour barrier. The windows are anodized aluminum and the roofing is SBS roofing.

**Interior Summary:**

The main floor has a terrazzo floor finish, other floors are resilient sheet flooring. The corridor walls are exposed giant brick and partition walls are painted gypsum board on steel studs. Ceiling finishes are T-bar ceilings in offices and common areas, stipple ceilings in residents rooms and painted gypsum board in service rooms. There are feature cedar ceilings and skylights on the top floor.

**Mechanical Summary:**

Ventilation is provided by three air handling units located in Mechanical Rooms and on the roof.

Air distribution system is high velocity single ductwork to VAV boxes with hot water reheat coils or chilled water coils in rooms, to grilles and diffusers and low velocity system to atrium.

Air conditioning is centrifugal chiller in the mech room with an air cooled cooling tower on the roof, and designated circulation pumps.

Make up air unit supply air to the stair wells .

Shell and tube type glycol heat exchangers and pumps are provided to serve heating systems for air handling units.

Heating water is provided by two boilers and circulating pumps.

Heating water piping in the building provides distribution to perimeter radiation, radiant panels, re-heat coils, unit heaters and air curtains. Hot water is circulated via base mounted pumps.

Spray coil humidification systems provided in central air handling unit.

Domestic hot water is supplied from boilers and storage tanks in the mechanical room. Copper piping distribution to plumbing fixtures complete with domestic hot water recirculation systems.

Direct digital control system provided.

Fire protection system for the facility consists of wet sprinkler system with fire pump and held fire extinguishers.

Sanitary service to City mains.

Storm service to City mains.

Overall mechanical system is in acceptable condition.

**Electrical Summary:**

The facility was originally built in 1980 and there has been no major upgrading since then, but there were minor renovations for some units, and floor last five years.

The main electrical service fed from an onsite pad mounted transformer. The electrical main distribution system is 347/600V, three-phase, four-wire and rated 2000A.

There is a back-up emergency power generator for building emergency lighting and critical mechanical loads.

The fluorescent fixtures are 20% T-12 with electromagnetic ballast , and 80% T-8 lamp fluorescent with electronics ballasts.

All fire alarm, telephone and Nurse call systems meet current facility requirements.

The overall rating for the facility shall be "Acceptable"

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\*

Concrete pile and pad foundations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

### A2020 Basement Walls (& Crawl Space)\*

Concrete foundation walls to crawlspace.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

### B1010.01 Floor Structural Frame (Building Frame)\*

Concrete frame with structural main floor slab and cast-in-place concrete floor slabs at the upper floor levels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

### B1010.03 Floor Decks, Slabs, and Toppings\*

Cast-in-place concrete floor slabs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

### B1010.09 Floor Construction Fireproofing\*

Concrete cast-in-place floor slabs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

### B1010.10 Floor Construction Firestopping\*

Vertical services are in fire rated shafts, service penetrations through floors appear to be firestopped.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

### B1020.01 Roof Structural Frame\*

Concrete frame.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**B1020.03 Roof Decks, Slabs, and Sheathing\***

Concrete roof slab.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1978	0	MAR-13

**B1020.06 Roof Construction Fireproofing\***

Concrete roof slab.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1978	0	MAR-13

**S2 ENVELOPE****B2010.01.06.03 Metal Siding\*\***

Horizontal prefinished metal panels to lower portion of walls to roof-top mechanical penthouses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event:** Replace metal siding. BOE: 90 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$14,000	Unassigned

**Updated:** MAR-13

**B2010.01.08 Cement Plaster (Stucco): Ext. Wall\***

Stucco to curved walls of roof-top mechanical penthouses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

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

Caulked perimeter to windows and door frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event:** Caulk windows and doors frames. B.O.E. 926 m

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$27,000	Unassigned

**Updated:** MAR-13

**B2010.02.01 Cast-in-place Concrete: Ext. Wall Const\***

Exposed aggregate concrete walls to main floor. Featured concrete sculptured mural adjacent to main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**B2010.02.02 Precast Concrete: Ext. Wall Const.\***

Precast concrete panels to upper three floors and stair wells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

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

Assumed batt insulation and polyethylene insulation and air/vapour barrier to back-up stud wall to exterior precast panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**B2010.06 Exterior Louvers, Grilles, and Screens\***

Prefinished metal louvers to roof-top mechanical penthouses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	0	MAR-13

**B2020.01.01.02 Aluminum Windows (Glass & Frame)\*\***

Anodized aluminum windows throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event:** Replace aluminum windows. B.O.E. 386 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$421,000	Unassigned

**Updated:** MAR-13

**B2020.02 Storefronts: Windows\*\***

Aluminum curtain walls meeting rooms and ancillary accommodation on main floor, facing atrium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event:** Replace aluminum curtain walls facing atrium.  
B.O.E. 34 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$37,000	Unassigned

**Updated:** MAR-13

**B2020.04 Other Exterior Windows\***

Curved aluminum framed solariums at each stairwell.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1978	0	MAR-13

**Event:** Replace aluminum framed solariums. B.O.E. 306 sq.m.

**Concern:**

Solariums constantly leak and are causing deterioration to the interior finishes as well as discomfort to the residents.

**Recommendation:**

Replace solariums with aluminum curtain walling of simpler configuration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$334,000	Medium

**Updated:** MAR-13

**B2030.01.01 Aluminum-Framed Storefronts: Doors\*\***

Aluminum doors to accommodation facing atrium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event:** Replace aluminum doors.B.O.E. 16 doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$46,400	Unassigned

**Updated:** MAR-13

**B2030.01.06 Automatic Entrance Doors\*\***

Automatic sliding aluminum doors to the exterior and vestibule at the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event:** Replace automatic sliding doors.B.O.E. 2 sets of double doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$39,300	Unassigned

**Updated:** MAR-13



**B2030.03 Large Exterior Special Doors (Overhead)\***

Insulated metal panel doors at maintenance and housekeeping loading bay areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**B3010.01 Deck Vapour Retarder and Insulation\***

SBS roofing replaced in 2008, assumed that the roof insulation and vapour barrier was also upgraded at that time.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2008	0	MAR-13

**B3010.04.04 Modified Bituminous Membrane Roofing (SBS)\*\* - Main Roof Area**

SBS roofing to main building replaced in 2008.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2008	25	MAR-13

**Event:** Replace SBS roofing. B.O.E. 2360 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$395,000	Unassigned

**Updated:** MAR-13

**B3010.04.04 Modified Bituminous Membrane Roofing (SBS)\*\* - Mechanical Penthouses**

SBS roofing to mechanical penthouse roofs replaced in 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	25	MAR-13

**Event:** Replace SBS roofing. B.O.E. 254 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$43,000	Unassigned

**Updated:** MAR-13

**B3010.04.08 Membrane Roofing (Inverted/Protected)\*\* - Atrium**

Inverted roof system over atrium, has exceeded it's life expectancy.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event:** Replace inverted roofing system to atrium. B.O.E. 671 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$125,000	Unassigned

**Updated:** MAR-13

**B3020.01 Skylights\*\* - Sloped glazing**

Aluminum framed sloped glazing skylights in atrium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event:** Replace sloped glazing skylights. B.O.E. 158 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$173,000	Unassigned

**Updated:** MAR-13

**B3020.01 Skylights\*\*- Domed**

Circular double skin domed skylights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event:** Replace domed skylights. B.O.E. 18 skylights

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$20,000	Unassigned

**Updated:** MAR-13

**S3 INTERIOR****C1010.01 Interior Fixed Partitions\***

Giant brick partitions to corridors. Steel stud and gypsum board partitions elsewhere.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1010.04 Interior Balustrades and Screens, Interior Railings\***

Painted metal mesh guardrails to common areas overlooking atrium, extended upwards with laminated glass in painted steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1010.05 Interior Windows\***

Pressed steel framed interior windows to rooms on main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1010.07 Interior Partition Firestopping\***

Fire rated partitions extend to underside of floor slabs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1020.01 Interior Swinging Doors (& Hardware)\***

Door closers are obsolete and spare parts are no longer available.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1978	0	MAR-13

**Event:** Replace door closers throughout. B.O.E. 300 doors

**Concern:**

Door closer parts no longer available.

**Recommendation:**

Replace door closers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$450,000	Medium

**Updated:** MAR-13

**C1020.03 Interior Fire Doors\***

Metal fire rated doors and frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1030.01 Visual Display Boards\*\***

Tackboards in common areas and nurses stations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace tackboards. B.O.E. 10 units**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$6,000	Unassigned

**Updated:** MAR-13**C1030.02 Fabricated Compartments (Toilets/Showers)\*\***

Prefinished metal toilet cubicles in locker rooms and main floor washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace metal toilet cubicles. B.O.E. 7 cubicles**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$12,600	Unassigned

**Updated:** MAR-13**C1030.05 Wall and Corner Guards\***

Combined wood horizontal wall guard and handrail throughout corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1030.06 Handrails\***

Wood handrails combined with horizontal wall protection throughout corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1030.08 Interior Identifying Devices\***

Plastic engraved signage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1030.10 Lockers\*\***

Full height metal lockers in locker rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace metal lockers. B.O.E. 228 lockers**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$102,600	Unassigned

**Updated:** MAR-13**C1030.12 Storage Shelving\***

Metal storage racks in store rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C1030.14 Toilet, Bath, and Laundry Accessories\***

Mirrors, soap dispensers, toilet roll holders, waste bin, grab bars in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C2010 Stair Construction\***

Concrete stairs and landings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C2020.05 Resilient Stair Finishes\*\***

Resilient sheet flooring to landings and stair treads, with rubber nosings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace sheet vinyl to stairs. B.O.E. 480 treads**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$38,400	Unassigned

**Updated:** MAR-13**C2020.08 Stair Railings and Balustrades\***

Painted metal handrails and balusters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C3010.06 Tile Wall Finishes\*\***

Ceramic tiles to washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event: Replace ceramic wall tiles.B.O.E. 2822 sq.m.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$678,000	Unassigned

**Updated:** MAR-13**C3010.11 Interior Wall Painting\***

Painted gypsum board partitions in all areas except corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C3020.01.02 Painted Concrete Floor Finishes\***

Painted concrete floors in maintenance area and mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C3020.02 Tile Floor Finishes\*\***

Ceramic floor tile in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	50	MAR-13

**Event: Replace ceramic floor tile.B.O.E. 600 sq.m.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$96,000	Unassigned

**Updated:** MAR-13**C3020.03 Terrazzo Floor Finishes\***

Terrazzo floor finish to public areas and corridors on main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C3020.07 Resilient Flooring\*\***

50% of corridor sheet flooring replaced in 2002.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2002	20	MAR-13

**Event: Replace corridor sheet flooring. B.O.E. 600 sq.m.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$480,002	Unassigned

**Updated:** MAR-13

**C3020.07 Resilient Flooring\*\***

Original sheet flooring has exceeded it's life expectancy and is badly worn.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1978	20	MAR-13

**Event:** Replace resilient sheet flooring. B.O.E. 7245 sq.m.

**Concern:**

The current flooring has exceeded it's life expectancy and is badly worn in some places.

**Recommendation:**

Replace sheet 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	\$580,000	Medium

**Updated:** MAR-13

**C3030.02 Ceiling Paneling (Wood)\***

Cedar slat ceilings below circular skylights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**C3030.05 Veneer Plaster Finishes (Stipple)\***

Stipple finish to ceilings in corridors and residents rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

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

T-bar ceilings to public areas and meeting rooms and offices on main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event:** Replace T-bar ceiling tiles. B.O.E. 1776 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$80,000	Unassigned

**Updated:** MAR-13



**C3030.07 Interior Ceiling Painting\***

Painted gypsum board ceilings in service rooms and washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D1010.01.02 Hydraulic Passenger Elevators\*\***

2 Montgomery hydraulic passenger elevators (4000 lbs. capacity) serve all floors. 2 Montgomery hydraulic passenger elevators (4000 lbs capacity) provided to service the Lynnwood Extended care centre. Problems with controllers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Refurbish elevator cars.B.O.E. 4 elevator cars**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$325,000	Unassigned

**Updated:** MAR-13

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

Molded fiberglass, mop sinks, floor mounted , SS strainer.

Single and double compartment stainless steel sinks complete with chrome plated swing spout, aerator, lever handles.

Stainless steel counter top sinks complete with gooseneck faucets in rooms.

Hair dressing sinks

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 13 Sinks**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$32,000	Unassigned

**Updated:** MAR-13

**D2010.05 Showers\*\***

Tiled handicap shower stalls, with chrome grab bars. Thermostatic mixing valve, pressure balanced.

Fiberglass shower cabin. Thermostatic mixing valve, pressure balanced.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 11 Showers**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$55,000	Unassigned

**Updated:** MAR-13

**D2010.06 Bathtubs\*\***

Assisted bath tub Bowl complete with automatic disinfections system, locking door, thermoscopic mixing valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 3 Bathtubs**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$65,000	Unassigned

**Updated:** MAR-13

**D2010.08 Drinking Fountains/Coolers\*\***

Refrigerated wall mounted drinking fountains

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	35	MAR-13

**Event: Replace 4 Drinking Fountains**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$16,000	Unassigned

**Updated:** MAR-13**D2010.10 Washroom Fixtures (WC, Lav, Urnl)\*\***

WC - Wall mounted and floor mounted, vitreous china, open front seat, flush valve and flush tanks.

LV - Countertop lavatories c/w two handle faucets. Wall hung barrier free, vitreous china lavatories with gooseneck faucets.

UR - wall mounted, vitreous china with flush valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	35	MAR-13

**Event: Replace 397 Washroom Fixtures**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$636,000	Unassigned

**Updated:** MAR-13**D2020.01.01 Pipes and Tubes: Domestic Water\***

Copper piping distribution throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D2020.01.02 Valves: Domestic Water\*\***

Plumbing fixtures complete with isolation valves.

Main branches c/w isolated valves.

Ball and globe valve types.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event: Replace 724 valves**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$240,000	Unassigned

**Updated:** MAR-13

**D2020.01.03 Piping Specialties (Backflow Preventers)\*\***

Reduced pressure backflow preventors serving incoming domestic water line and fire lines.  
 Backflow prevention installed on heating water.  
 Double check valve arrangement serving chilled water system.  
 Vacuum breakers serving NFHB.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace 5 Piping Specialties (Backflow Preventors)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$32,000	Unassigned

**Updated:** MAR-13

**D2020.02.02 Plumbing Pumps: Domestic Water\*\***

In-line domestic water recirculation pumps.  
 In-line circulation pump to storage tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace 4 Plumbing Pumps: Domestic Water**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$45,000	Unassigned

**Updated:** MAR-13

**D2020.02.03 Water Storage Tanks\*\***

Domestic water storage tanks provides hot water to the rooms and kitchen

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 2 water storage tank**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$90,000	Unassigned

**Updated:** MAR-13

**D2020.02.04 Domestic Water Conditioning Equipment\*\***

Reverse osmosis system on domestic hot water.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace 1 Dom. Water Conditioning Equipment**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$20,000	Unassigned

**Updated:** MAR-13

**D2020.02.06 Domestic Water Heaters\*\***

Domestic hot water boiler with storage tank for rooms.  
Raytherm 2390-WTB, 70409 kW input.  
Domestic water heater for kitchen, 82 C supply water temperature,  
LAARS, 12K1CCTC, 146.5 kW input, 118.6 kW output.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace 2 Domestic Water Heaters**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$70,000	Unassigned

**Updated:** MAR-13

**D2020.03 Water Supply Insulation: Domestic\***

Water piping insulated throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D2030.01 Waste and Vent Piping\***

Cast iron, copper and some plastic.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D2030.02.04 Floor Drains\***

General purpose floor drains and funnel drains.  
Located in mech rooms and service areas

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D2040.01 Rain Water Drainage Piping Systems\***

Cast iron, PVC and copper.  
Rain water collection via roof drains to storm mains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D2040.02.04 Roof Drains\***

Large dome, sump roof drains with flashing flange and integral gravel stop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3020.02.01 Heating Boilers and Accessories: H.W.\*\***

Heating water boilers located in mech room.  
Rytherm 3990-WTD, 1172 kW input.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	35	MAR-13

**Event: Replace 2 Heating Boilers & Accessories**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$240,000	Unassigned

**Updated:** MAR-13

**D3020.02.02 Chimneys (& Comb. Air): H.W. Boiler\*\***

Common chimney up to roof with wall louver for combustion air

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	35	MAR-13

**Event: Replace 10 m of chimney and comb air duct**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$7,500	Unassigned

**Updated:** MAR-13

**D3020.02.03 Water Treatment: H. W. Boiler\***

Chemical pot feeder in heating system piping with treatment schedule and test kits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3030.02 Centrifugal Water Chillers\*\***

Centrifugal water chiller Trane CUIA-025E-HB, 500/3/60

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event: Replace 1 Water Chiller**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$370,000	Unassigned

**Updated:** MAR-13**D3030.05 Cooling Towers\*\***Roof mounted air cooled cooling tower.  
BAC CFT-24H, 75.hp, 43.9 l/s @ 275 kPa

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1978	25	MAR-13

**Event: Replace 1 cooling tower****Concern:**

Cooling tower is corroding and scaling is evident.

**Recommendation:**

Replace cooling tower with new unit.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$240,000	Medium

**Updated:** MAR-13**D3040.01.01 Air Handling Units: Air Distribution\*\***

There are three build up air units with supply and return fans, filter section, chilled water coil and glycol heating coil with pump and spray coil humidifier section, and heat recovery coils of exhaust air.

F-1 Trane, 15104 l/s supply air, F-2 return fan

F-8 Trane 11328 l/s supply air, F-9 return fan

F-10 Trane

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 3 air handling units**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$400,000	Unassigned

**Updated:** MAR-13

**D3040.01.02 Fans: Air Distribution (Remote from AHU)\***

Fan coil unit in each ward room, with chilled water coil

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3040.01.03 Air Cleaning Devices: Air Distribution\***

50mm panel type filters serving air handling units, summer, winter

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3040.01.04 Ducts: Air Distribution\***

Low and medium velocity ductwork distribution throughout the building. Single duct systems. Majority of ductwork concealed in ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3040.01.06 Air Terminal Units: Air Distribution (VAV/CV Box)\*\***

VAV boxes with terminal reheat coils with pneumatic controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 92 VAV boxes**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$110,000	Unassigned

**Updated:** MAR-13

**D3040.01.07 Air Outlets & Inlets: Air Distribution\***

Combination of wall mounted grilles and ceiling square diffusers for supply air application.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13



**D3040.03.01 Hot Water Distribution Systems\*\***

Steel and copper piping distribution to perimeter heating units.  
 Base mounted circulation pumps are provided to serve hot water and glycol systems.  
 Pumps EBARA 80.5 FM, 13.4 l/s @ 164 kPa, 5 HP, 575/3/60  
 Glycol pumps 2.8 l/s @ 29.9 kPa, 0.55 HP

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event:** **Replace Hot Water Distribution Systems. BOE:**  
**11260 sq.m. GFA**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$1,047,000	Unassigned

**Updated:** MAR-13

**D3040.03.02 Chilled Water Distribution Systems\*\***

One base mounted and in-line circulation pumps provide chilled water to air handling unit in penthouse  
 One condensed water pump to cooling tower.  
 EBARA 105 SIM, 43.9 l/s @ 269kPa, 25 HP, 575/3/60  
 Condensed 43.9 l/s

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event:** **Replace Chilled Water Distribution Systems. BOE:**  
**11260 sq.m GFA.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$563,000	Unassigned

**Updated:** MAR-13

**D3040.04.01 Fans: Exhaust\*\***

Variety of exhaust fans ducted to penthouse mechanical room to common wall louver and heat recovery. Fans serve general exhaust system, specialized areas, washrooms and laundry areas. Fans are centrifugal cabinet, centrifugal blowers with forward curved wheels. Exhaust fans capacities varies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event:** **Replace 7 Exhaust Fans**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$55,000	Unassigned

**Updated:** MAR-13

**D3040.04.03 Ducts: Exhaust\***

Low velocity galvanized steel exhaust ducts up to SMACNA standards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3040.04.05 Air Outlets and Inlets: Exhaust\***

Metal exhaust grilles of various types and sizes are located throughout the ceiling areas of the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D3040.05 Heat Exchangers\*\***

heating water to glycol shell and tube heat exchangers in penthouse mech rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 2 Heat Exchanger**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$40,000	Unassigned

**Updated:** MAR-13

**D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)\*\***

Atrium ventilation unit, roof mounted: Eng Air, FWD 401/DGL-2200, 7552 l/s @ 373 Pa, 879 kW output, 20 HP, 575/3/60

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 1 Packaged Roof Top Unit.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$120,000	Unassigned

**Updated:** MAR-13

**D3050.03 Humidifiers\*\***

Spray coil humidifiers serving air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event: Replace 2 Humidifiers**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$40,000	Unassigned

**Updated:** MAR-13

**D3050.05.02 Fan Coil Units\*\***

Cabinet and recessed wall mounted force flow heaters serving vestibules.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 6 Force Flow Heaters**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$30,000	Unassigned

**Updated:** MAR-13

**D3050.05.03 Finned Tube Radiation\*\***

Perimeter wall fin radiation complete with various type enclosure cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event: Replace Finned Tube Radiation. BOE: 11260 sq.m. GFA.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$462,000	Unassigned

**Updated:** MAR-13

**D3050.05.06 Unit Heaters\*\***

Cabinet horizontal and vertical discharge, propeller, hot water unit heaters in service rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 7 Unit Heaters**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$35,000	Unassigned

**Updated:** MAR-13

**D3060.02.01 Electric and Electronic Controls\*\***

Line voltage controls for force flow and unit heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace Electric Controls. BOE: 11260 sq.m. GFA.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$17,000	Unassigned

**Updated:** MAR-13

**D3060.02.02 Pneumatic Controls\*\***

Pneumatic controls complete with air compressor (Johnson Controls), air dryer, pneumatic piping network and operating devices.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event: Replace Pneumatic Controls. BOE: 11260 sq.m. GFA.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$63,000	Unassigned

**Updated:** MAR-13

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

Digital programmable BMCS on major equipment

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event:** **Replace Building Systems Controls (BMCS, EMCS). BOE: 11260 sq.m.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$214,000	Unassigned

**Updated:** MAR-13

**D4010 Sprinklers: Fire Protection\***

Building is sprinkled as per NFPA13. Automatic sprinkler system consists of wet pipes. Automatic wet pipe sprinkler alarm valve.

Fire department connection provided. Fire line to sprinkler trees located in Mechanical Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D4020 Standpipes\***

Standpipe system provided serving building. Fire hose cabinets complete with fire department connection.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D4030.01 Fire Extinguisher, Cabinets and Accessories\***

Fire extinguishers provided throughout:- 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	1978	0	MAR-13

**D4090.06 Smoke Protection & Exhaust Fans\*\***

There are five stair well pressurization units with gas heating.

Stair well pressurization fans Eng Air, 8024 l/s

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event:** **Replace 5 smoke fans**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$120,000	Unassigned

**Updated:** MAR-13

**D4090.07 Fire Pumps & Water Storage Tanks\***

Fire pump Wilron 4-481-11A 30 HP 500/3/60, 47.3 l/s @ 310.8 kPa

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**S5 ELECTRICAL****D5010.01.02 Main Electrical Transformers (Utility Owned)\***

A pad mounted transformer were installed on site for the facility. It is serviced by a utility company.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2009	0	MAR-13

**D5010.02 Secondary Electrical Transformers (Interior)\*\***

There are three 347/600-120/208V Secondary transformer in the building. Transformer sizes are listed below:

Two 450 kVA  
One 150 kVA

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event: Replace 3 Secondary Electrical Transformers (Interior)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$55,000	Unassigned

**Updated:** MAR-13

**D5010.03 Main Electrical Switchboards (Main Distribution)\*\***

The main service for the building is 347/600V, three phase, four wire and rated 2000A. The service is underground fed from onsite pad mounted transformer. The main distribution consists 2000A main incoming breaker, distribution sections for both Roger Parker Pavillion and Lynnwood Auxiliary Hospital, and 5 central distribution service in this building. Breakers are adequately marked. MDP has some spare space for future additions. One of sub feeding breaker is having tripping issues.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	40	MAR-13

**Event: Replace 6 Main Electrical Switchboards (Main Distribution)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$250,000	Unassigned

**Updated:** MAR-13

**D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)\*\***

120/208V panel are installed trough out entire building electrical rooms. There are 25 panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 25 Electrical Branch Circuit Panelboards (Secondary Distribution)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$250,000	Unassigned

**Updated:** MAR-13

**D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers\*\***

The MCC's were installed for major mechanical loads in the building at few different locations; All together there are 13 sections and several spare spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 13 Switchboards, Panelboards, and (Motor) Control Centers**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$75,000	Unassigned

**Updated:** MAR-13

**D5010.07.02 Motor Starters and Accessories\*\***

Individual motor starters and load switches are used major mechanical ventilation units and some small water pumps. Starters and load switches are completed with pilot lights and hand-off-auto selector switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 260 Motor Starters and Accessories**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$120,000	Unassigned

**Updated:** MAR-13



**D5010.07.03 Variable Frequency Drives\*\***

One Hitachi VFD is installed for a major mechanical load.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	30	MAR-13

**Event: Replace 1 Variable Frequency Drive**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$30,000	Unassigned

**Updated:** MAR-13

**D5020.01 Electrical Branch Wiring\***

Branch wirings are originally installed with the building; All the wires are cooper and NMD type installed in concealed walls. BX is used from junction boxes to mechanical equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1978	0	MAR-13

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

The most of light fixtures are locally controlled by line voltage switches in the rooms, and corridor lights at nurse stations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.02.02.01 Interior Incandescent Fixtures\***

The incandescent pot lights were installed in the dining areas, some waiting areas. Some of the light bulbs retrofit to compact fluorescent lamp.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.02.02.02 Interior Fluorescent Fixtures\*\***

The light fixtures were originally T-12 completed with magnetic ballast. Some of them were retro fitted with 80% of T-8 fluorescent tubes completed with electronic ballast during regular maintenance with operation budget.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace 2250 Interior Fluorescent Fixtures**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$1,125,000	Unassigned

**Updated:** MAR-13

**D5020.02.02.03 Interior Metal Halide Fixtures\***

Metal Halide fixtures are installed in atrium between two building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.02.02.05 Other Interior Fixtures\***

Heat Lamps are installed in all bathtubs rooms and completed with timer switch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.02.03.01 Emergency Lighting Built-in\***

The facility has a power generator. The building is fed from this power generator for emergency power needs and lighting system. Some of the florescent lights are assigned as emergency lights with good coverage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.02.03.02 Emergency Lighting Battery Packs\*\***

There are 15 battery pack are provided for the critical areas, main electrical rooms, and generator room. Wall mounted battery packs; completed with integral lamps, and remote batteries throughout the building. Units are regularly tested and some unit batteries are replaced if required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	20	MAR-13

**Event: Replace 15 Emergency Lighting Battery Packs**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$15,000	Unassigned

**Updated:** MAR-13

**D5020.02.03.03 Exit Signs\***

Exit signs are located at required locations and exits. Exist signs are incandescent type.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.03.01.01 Exterior Incandescent Fixtures\***

Recessed ceiling mounted incandescent light fixtures are installed under canopy, and bollard type fixtures are installed in the court yards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.03.01.02 Exterior Florescent Fixtures\***

Recessed ceiling mounted light fixtures are installed under canopy.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5020.03.01.03 Exterior Metal Halide Fixtures\***

Exterior lighting are provided wall mounted along the building perimeter, and pole mounted fixtures completed with Metal Halide bulbs along entire site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

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

Outside lights are controlled by photocell, timer and integrated to the BMS.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5030.01 Detection and Fire Alarm\*\***

A Honeywell Notifier control panel completed with command centre is used for the facility fire alarm system and located at the main entrance, and completed with annunciator panels, two stage manual pull stations, detectors, speakers, fire alarm mini-speaker/strobe throughout the building. It is externally monitored.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	25	MAR-13

**Event: Replace Detection and Fire Alarm.(1)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$525,000	Unassigned

**Updated:** MAR-13

**D5030.02.01 Door Answering\***

A buzzer is provided at the front entrance door and answering and door releasing system on the second floor at the nurse desk for after hours access.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5030.02.03 Security Access\*\***

Stand alone number punch pads are provide by the resident out going doors to stop un-authorized resident escape,and exits, and incoming.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event: Replace Security Access.(1)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$130,000	Unassigned

**Updated:** MAR-13

**D5030.02.04 Video Surveillance\*\***

A security cameras is provided at the main door and completed with a monitor on the second floor at the nurse desk area for after hours access

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	25	MAR-13

**Event: Replace Video Surveillance system.(1)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$15,000	Unassigned

**Updated:** MAR-13

**D5030.03 Clock and Program Systems\***

Independent battery operated wall mounted clocks are provided in the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**D5030.04.01 Telephone Systems\***

Nortel Network switchboard is provided for telephone system for the facility telephone service. A telephone outlet is provided in each resident room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2009	0	MAR-13

**D5030.04.03 Call Systems\*\* - Nurse Call**

An Rolland Responder IV and Asscom combined nurse call system is installed and completed with wireless pendant phone on nurses, and digital message centers in the corridors, bracelet on the residents, counsel at the nurse desks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2010	25	MAR-13

**Event: Replace Nurse Call Systems.(1)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$130,000	Unassigned

**Updated:** MAR-13

**D5030.04.04 Data Systems\***

Data outlets are installed through offices; and Cat 5 and 5e cables are installed either conduit or free air.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	0	MAR-13

**D5030.04.05 Local Area Network Systems\***

One server, and patch panels are installed trough out the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	0	MAR-13

**D5030.06 Television Systems\***

The TV outlets are available in all resident areas as per pay view. Serviced provided by a utility company.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1978	0	MAR-13

**D5030.07 Other Communications and Security Systems\***

Wireless server connection is provided trough roof mounted antenna to Ms. Concordia Hospital building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	MAR-13

**D5090.01 Uninterruptible Power Supply Systems\*\***

Three UPS are installed for the telephone system, and data system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	30	MAR-13

**Event: Replace 3 Uninterruptible Power Supply Systems**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$12,000	Unassigned

**Updated:** MAR-13

**D5090.02 Packaged Engine Generator Systems (Emergency Power System)\*\***

A 250KW diesel fired BBC emergency power generator is provided for the facility. It is located on the roof level penthouse and completed transfer switch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	35	MAR-13

**Event: Replace 1 Packaged Engine Generator System (Emergency Power System)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$180,000	Unassigned

**Updated:** MAR-13

**S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION****E2010.02 Fixed Casework\*\***

Reception desk in main foyer, vanity counters in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	35	MAR-13

**Event: Replace millwork. B.O.E. 155 m**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$155,000	Unassigned

**Updated:** MAR-13**E2010.03.01 Blinds\*\***

Draperies to residents rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	30	MAR-13

**Event: Replace drapery blinds . B.O.E. 386 sq.m.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$39,000	Unassigned

**Updated:** MAR-13

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

At grade access from parking to main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**K4010.02 Barrier Free Entrances\***

Automatic sliding doors to main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**K4010.03 Barrier Free Interior Circulation\***

Circulation on each floor is on one level. Access between floors is provided via elevators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**K4010.04 Barrier Free Washrooms\***

Barrier free washrooms provided throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**K4030.01 Asbestos\***

No asbestos noted or reported. Mechanical insulation may contain asbestos.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**K4030.04 Mould\***

No mould noted or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13

**K4030.09 Other Hazardous Materials\***

No hazardous materials noted or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1978	0	MAR-13



**K5010.01 Site Documentation\***

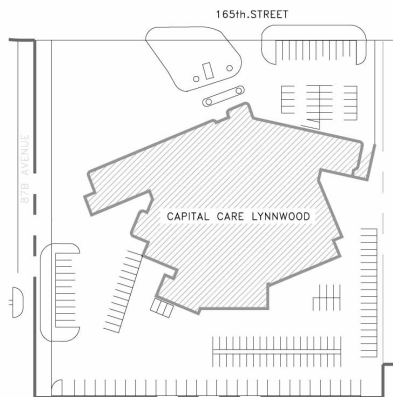
Prime Consultant: Bacz Engineering Ltd.

The site maintenance supervise Greg Adam provided information on the building and was our guide around the building.

Year of Evaluation: 2012

Building Area Evaluated: 11,260 m2

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2012	0	MAR-13

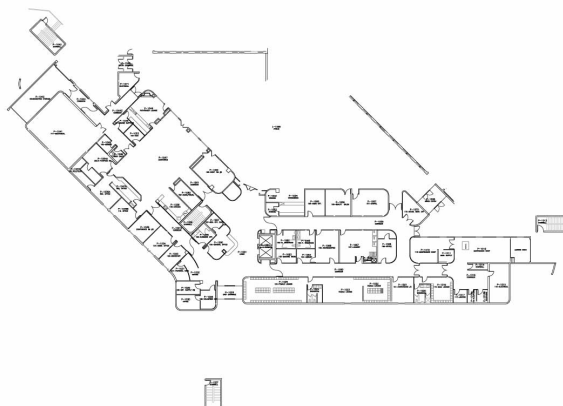


Site Plan

**K5010.02 Building Documentation\***

The building has four levels has an exposed aggregate precast concrete panel facade with SBS roofing and aluminum windows. The total area of the building is 11260 sq.m.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2012	0	MAR-13



Main Floor Plan