RECAPP Facility Evaluation Report

Alberta Health Services-Edmonton



Capital Care Grandview B1040A Edmonton

Report run on: March 15, 2013 10:55 AM

Edmonton - Capital Care Grandview (B1040A)

Evaluation Details

Evaluation Company: Morrison Hershfield

Evaluation Date: October 24 2012

Evaluator Name: Julien St-Pierre

Total Maintenance Events Next 5 years: \$5,993,255 5 year Facility Condition Index (FCI): 23.50%

General Summary:

Construction Year: 0

The Capital Care Grandview building was constructed in 1981.

Facility Details

Building Name: Capital Care Grandview

Address: 6215 - 124 Street

Location: Edmonton

Building Id: B1040A Gross Area (sq. m): 7,435.00 Replacement Cost: \$25,506,697

The total floor area of the building is approximately 7,500 m2.

Structural Summary:

The building is constructed with a cast-in-place concrete superstructure, with concrete slabs, beams, columns, and foundation walls. Steel framing is supplements the concrete frame in select areas in the building.

The structure of the building is generally in acceptable condition.

Envelope Summary:

The envelope of the building consists primarily of brick masonry units on precast panels or concrete masonry unit walls. Aluminum-framed double-glazed windows comprise the fenestration of the building. Door systems are aluminum-frame doors with automatic operators, and steel utility doors. The roofing of the building is an SBS roofing assembly.

Overall, the building envelope is in acceptable condition.

Interior Summary:

The interior walls are predominately exposed masonry or painted gypsum board. Ceilings of the building are acoustic ceiling tile, metal ceiling tile, and painted gypsum board. Floor finishes are comprised of sheet vinyl flooring, with carpet located in offices and engineered hardwood in common areas.

Overall, the interior of the building is in acceptable condition.

Mechanical Summary:

The mechanical systems at the Capital Care Grandview building are comprised of a mix of renovated and original (1971) equipment. Original equipment includes the majority of piping, air handling, fire suppression and cooling equipment. Boilers and domestic hot water heaters have been upgraded recently (2001 and 2009) however the majority of pumps for these systems are original. Heating and domestic hot water distribution systems are original. The main air handling units and kitchen make-up air system are original. Additional packaged air handling units were added in 1993. Controls are a mix of original pneumatics and newer electronics.

Major repairs and replacements are likely to be required in the coming years. The majority of original equipment is past the end of its expected design life and failures are becoming more common. A major replacement of original castiron waste piping is currently underway which includes replacement of the majority of fixture isolation valves on the domestic water supply lines.

The highest priority mechanically is the cooling system. The South compressor frequently fails and has required significant repairs. It is recommended that the South compressor (and associated condenser) be replaced soon to avoid loss of cooling capability. The North cooling equipment is still functioning but is past the end of its expected design life - replacement of the North compressor and condenser at the same time should be considered.

Overall, the mechanical systems are in acceptable condition.

Electrical Summary:

The electrical supply is provided by a utility-owned transformer on the northeast side of the building.

The building has a 1600A, 120/208V, single phase, 3 wire electrical service. MCC's are located in the penthouse, and the branch circuit panelboards are located throughout the facility. Emergency power is provided by a 100kW stand alone generator.

The lighting mainly consists of T12 and T8 fluorescent fixtures in the interior. The dining halls on both patient floors have fluorescent pot light fixtures with some halogen decorative pendant fixtures. There are two metal halide high bay fixtures in the mechanical room installed to add some light to the room. Exterior lighting consists of metal halide on the roof and high pressure sodium underneath the raised walkway. Exit lights are incandescent throughout.

A Notifier fire alarm system main panel is provided by the main entrance vestibule. Signaling devices include bell strobes, heat & smoke detectors and pull stations at the required exits.

Nurse call systems are patched together by two manufactures, Telus and Sub Accute.

The electrical systems are generally in good condition.

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

	FRUCTURA	L		
A1010 S	Standard Found	lations*		
The fou	ndations of the b	uilding consist of	cast-in-place c	concrete foundation walls on cast-in-place concrete strip footings
Rating 4 - Accep	otable	<u>Installed</u> <u>I</u> 1971	Design Life U 0	Ipdated MAR-13
<u>A1030 S</u>	Slab on Grade*			
The mai	in floor slab cons	sists of a cast-in-p	lace concrete	slab on grade.
Rating 3 - Margi	inal	Installed 1971	Design Life U 0	Jpdated MAR-13
Event:	Magnitude Est Concern: Differential mov Recommenda	vement at expans	ion joint.	
	Type Repair Updated: MAF	2013	<u>Cost</u> \$30,000	<mark>Priority</mark> High
Event:	-	v Expansion Joir	nt Concerns	
	Concern:	•		
	causing lifting of this is a locatio Recommenda Retain structure	ttlement is occu of the floor. The b n of water ingress tion: ral/envelope spec le repair methodo	uilding operato s. cialist to asses	or suspects that
	Type Study	<u>Year</u> 2013	<u>Cost</u> \$6,000	<u>Priority</u> High
	Updated: MAR	₹-13		
<u>B1010.0</u>	01 Floor Structu	ral Frame (Build	ing Frame)*	
The stru	ctural system of	the building is ca	st-in-place con	ncrete beams and columns,

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

Interior load bearing walls are constructed of concrete masonry units or exposed 6" brick.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

B1010.03 Floor Decks, Slabs, and Toppings*

Floor decks are constructed of pre-cast hollow-core decks, spanning between concrete beams.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

B1010.09 Floor Construction Fireproofing*

Spray-applied fireproofing is located on exposed steel work.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

B1020.01 Roof Structural Frame*

The roof is supported by cast-in-place concrete beams and and concrete masonry unit construction.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

B1020.02 Structural Interior Walls Supporting Roofs*

Concrete masonry unit walls support the roof decks at portions of the building.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

B1020.03 Roof Decks, Slabs, and Sheathing*

Roof decks are constructed of pre-cast hollow-core concrete decks.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Brick masonry units are the predominant cladding material of the building. Minor cracking between the brick and the mortar joints was noted at select locations (refer to B2010-01.11 Joint Sealers).

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

Event: Repointing allowance for brick masonry (~240 m2)

Concern:

Areas of step cracking of the masonry veneer were noted. Installation of sealant in these cracks is a temporary measure (refer to B2010.01.11 Joint Sealers), however, repointing of the masonry veneer is recommended in the future.

Recommendation:

Repoint brick masonry at locations of cracking mortar.

Туре	Year	Cost	Priority
Repair	2014	\$21,000	Medium

Updated: MAR-13

B2010.01.05 Exterior Insulation and Finish Systems (EIFS)*

EIFS is the cladding of the Friendship room extension to the west of the main entrance.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2004	0	MAR-13

Event: Replace EIFS cladding assembly (~43 m2)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2034	\$33,600	Unassigned

Updated: MAR-13

B2010.01.06.03 Metal Siding**

The penthouse mechanical walls were retrofitted with metal wall panels in conjunction with the 1999 roof replacement.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	1999	40	MAR-13

Event: Replace Exterior Metal Siding (~243 m2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2039	\$31,900	Unassigned

B2010.01.09 Expansion Control: Ext. Wall*

A main building expansion joint is located approximately at the centre of the building.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

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

Sealant is located at window jambs, window sill flashings, wall expansion joints, and in isolated locations where mortar has cracked between stepped brick courses and the adjoining brick cladding. It appears that the sealant around window elements has been replaced more recently than the wall sealant.

Adhesion failure was noted in several instances of the expansion joint and wall sealant.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-13

Event: Install sealant on

Concern:

Sealant has been installed in step cracks in the brick coursing. However, locations were noted where additional sealant should be installed, as the extent of cracking has expanded.

Recommendation:

Install sealant at locations of cracked brick.

Туре	Year	Cost	Priority
Repair	2013	\$1,800	Medium

Updated: MAR-13

Event: Replace sealant at building expansion joints and existing mortar cracks (~86m)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2014	\$2,600	Unassigned

Updated: MAR-13

Event: Replace sealant at window jambs and sill flashing (~833 m)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$24,300	Unassigned

Updated: MAR-13

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

Precast concrete panels support the exterior brick masonry at between window bands.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

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

Rigid insulation is installed on the exterior of the concrete beams and concrete masonry unit walls.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

B2010.05 Parapets*

~8" parpets line the exterior perimeter of the roof areas. Cap flashing of the parapets appears to have been replaced concurrently with the roof replacement program of 1999.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

B2010.06 Exterior Louvers, Grilles, and Screens*

Louvers provide air flow to the mechanical air supply and exhaust.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

B2010.09 Exterior Soffits*

Exposed precast concrete panels comprise the soffts above window areas.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	1971	0	MAR-13

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

Aluminum-framed double-glazed windows provide the main fenestration of the building.

Poor thermal performance of the original window frame and glazing assemblies was reported by the building maintenance staff, resulting in difficulty providing balanced thermal comfort via air handling units; this is likely due to poor insulation value (R-Value) of the original window assemblies.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-13

Event: Replace aluminum windows (~670 m2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$643,300	Unassigned

B2020.03 Glazed Curtain Wall**

Curtain wall glazing is located on the friendship room extension.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2004	40	MAR-13

Event: Replace Curtain Wall (~23 m2)

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$26,600	Unassigned

Updated: MAR-13

B2030.01.01 Aluminum-Framed Storefronts: Doors**

Aluminum-frame store front doors provide access at the main entrance and at the rear.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace Storefront Doors (2 ea)

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2016	\$4,900	Unassigned

Updated: MAR-13

B2030.01.06 Automatic Entrance Doors**

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	30	MAR-13

Event: Replace automatic entrance doors (2 ea)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$27,200	Unassigned

Updated: MAR-13

B2030.02 Exterior Utility Doors**

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	40	MAR-13

Event: Replace Exterior Utility Doors (7 ea)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$7,000	Unassigned

		Edmonton - Capital Care Grandview (B1040A)
B2030.03 Large Exter	rior Special Doors (Overhea	ad)*
An insulated overhead	metal door provides access	to the loading dock.
Rating	Installed Design Lif	-
4 - Acceptable	1971 0	MAR-13
	ur Retarder and Insulation*	
Self-adhered vapour b this type of assembly.	arrier is assumed to be instal	Illed onto the roof deck at the time of roof replacement, as is typical fo
Rating	Installed Design Lif	
4 - Acceptable	1971 0	MAR-13
B3010 04 04 Modified	Rituminous Membrane Ro	oofing (SBS)** - Friendship Room Extension
-		extension to the northwest of the main entrance.
<u>Rating</u> 5 - Good	Installed Design Lif	fe <u>Updated</u> MAR-13
Event: Replace SBS	S roofing membrane at over	<u>r friendship</u>
<u>centre (~60n</u>	<u>12)</u>	
<u>Type</u> Lifecycle Repla	Acement <u>Year</u> <u>Cost</u> 2029 \$10,500	D Unassigned
Updated: M		
•		ofing (CDC)** Main Duilding
		oofing (SBS)** - Main Building
SBS membrane roofin	g is located on the main build	ding and on the mechanical penthouse areas.
Ridging of the membra	ane was noted in several loca	ations; however, no roof leaks were reported.
Rating	Installed Design Lif	
4 - Acceptable	1999 25	MAR-13
	S membrane on main roof a	und
	<u>reas (~2677 m2)</u>	
<u>Type</u> Lifecycle Repla	acement <u>Year</u> <u>Cost</u> 2024 \$467,40	00 Unassigned
		<u> </u>
Updated: M	10-10	

B3010.08.02 Metal Gutters and Downspouts**

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-13

Event: Replace downspouts (~45 feet)

Туре	Year	Cost	Priority
Lifecycle Replacement	2034	\$1,000	Unassigned

S3 INTERIOR

C1010.01 Interior Fixed Partitions* Interior wall partitions consist predominately of exposed concrete brick construction. Rating Installed Design Life Updated **MAR-13** 4 - Acceptable 1971 0 C1010.03 Interior Operable Folding Panel Partitions** Folding panel partition is located within the auditorium area. Installed Design Life Updated Rating 4 - Acceptable 1971 30 **MAR-13** Replace operable folding parition (~27 m2). Event: Priority Туре Year Cost Lifecycle Replacement 2016 \$30,600 Unassigned Updated: MAR-13 C1010.05 Interior Windows* Several pressed-steel frame interior windows are located throughout the building. Installed Design Life Updated Rating 4 - Acceptable 0 **MAR-13** 1971 C1020.01 Interior Swinging Doors (& Hardware)* A variety of plastic laminate, sold core wood, and metal doors are located through the building. Publicly accessible doors are equipped with lever-type handsets. Several door frames have experienced superficial damage, and several doors have required repair and replacement. Rating Installed Design Life Updated 3 - Marginal 1971 0 **MAR-13** Replacement of damaged swing doors into patient Event: rooms (~27 ea). Concern: Approximately 30% of patient room doors have experienced damage at swinging hardware. **Recommendation:** Replace doors and reuse existing hardware. Priority Туре Year Cost Failure Replacement 2014 \$32,100 Medium

C1020.03 Interior Fire Doors	<u>s*</u>	
Interior firedoors are provided	d with magnetic hold ope	en devices.
<u>Rating</u> 5 - Good	Installed Design Life	MAR-13
C1030.01 Visual Display Bo	ards**	
Display boards are located wi	ithin board rooms.	
Rating 4 - Acceptable	Installed Design Life	MAR-13
Event: Replace display bo	oard (2 ea)	
Type Lifecycle Replacement	t 2016 \$1,400	Priority Unassigned
Updated: MAR-13		
C1030.02 Fabricated Compa	artments (Toilets/Shov	vers)**
Metal toilet paritions are locat	ted in all multi-stall wash	nrooms in the building.
Rating 4 - Acceptable	Installed Design Life	MAR-13
Event: Replace metal toile	et partition (7 ea)	
Type Lifecycle Replacement	t 2016 \$8,200	Priority Unassigned
Updated: MAR-13		
C1030.05 Wall and Corner G	<u>Guards*</u>	
Metal corner guards are locat	ted on high exposure wa	all conditions.
Rating 4 - Acceptable	Installed Design Life	MAR-13
C1030.06 Handrails*		
Wooden wall-mounted handra	ails are located in corrid	lors.
Rating 4 - Acceptable	InstalledDesign Life19710	MAR-13

C1030.07 Fireplaces and Stoves*

A gas-fired fireplace is located in the friendship room.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	0	MAR-13

C1030.08 Interior Identifying Devices*

Various floor directories, identification signage, and way-finding sings are located throughout the building.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

C1030.10 Lockers**

Full, half, and third-size lockers are located within main floor locker rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace lockers (~300 ea).

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$144,100	Unassigned

Updated: MAR-13

C1030.15 Scales*

An in-floor scale is located outside the laundry room.			
Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

C2010 Stair Construction*

Stairs in the building are constructed of steel pans with concrete topping.

Rating	Installed	Design Life	Updated
5 - Good	1971	0	MAR-13

C2020.05 Resilient Stair Finishes**

Sheet vinyl flooring is provided on all stairwell floors and on stair treads.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	20	MAR-13

Event: Relace sheet vinyl flooring in stairwells (~160 m2).

TypeYearCostPriorityLifecycle Replacement2016\$14,000Unassigned

Updated: MAR-13

C2020.08 Stair Railings and Balustrades*

Standard pipe handrail on posts is provided in all stairwells.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

C3010.01 Concrete Wall Finishes (Unpainted)*

Unpainted concrete walls are located within select low-use rooms.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

C3010.06 Tile Wall Finishes** - 1997 Bathroom Renovation

Rating	Installed	Design Life	Updated
5 - Good	1997	40	MAR-13

Event: Replace bathroom ceramic tile (~270 m2).

Туре	Year	Cost	Priority
Lifecycle Replacement	2037	\$45,200	Unassigned

C3010.06 Tile Wall Finishes** - Original

Ceramic tile is located on walls in washrooms and in the common kitchen area.

The majority of the original wall tile is in good condition; sections of tile require replacement in the main floor kitchen.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-13

Event: Replace ceramic wall tile (~ 1566 m2).

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2021	\$262,000	Unassigned

Updated: MAR-13

Event: Replace tile in kitchen (~15 m2).

Concern:

Several areas of tile have deteriorated on the north wall of the kitchen. **Recommendation:**

Replacement of deteriorated sections of tile is recommended for sanitary purposes.

Туре	Year	Cost	Priority
Failure Replacement	2013	\$2,600	High

Updated: MAR-13

C3010.11 Interior Wall Painting*

Interior gypsum board walls have a paint finish.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

C3010.14 Other Wall Finishes* - Exposed Brick Masonry

Exposed brick masonry walls are located within central corridors and stairwells.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

C3020.01.01 Epoxy Concrete Floor Finishes*

Epoxy coating is located on exposed concrete floors in select areas in the building, including bathtub rooms on the first and second floors.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

C3020.01.02 Painted Concrete Floor Finishes*

Exposed concrete floors are finished with paint in select locations.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

C3020.02 Tile Floor Finishes** - Ceramic Tile

Original ceramic tile floors are located within bathrooms

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-13

Event: Replace original ceramic tiles (~1552 m2).

Туре	Year	Cost	Priority
Lifecycle Replacement	2021	\$259,700	Unassigned

Updated: MAR-13

C3020.02 Tile Floor Finishes** - Quarry Tile

Quarry tile is located on the kitchen floor area, and is assumed to be original to the building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	50	MAR-13

Event: Replace floor tile in kitchen area (~280m2).

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2021	\$75,400	Unassigned

Updated: MAR-13

C3020.04 Wood Flooring** - Engineered Wood

Engineered hardwood is located in the central common area of the first and second floors.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2011	30	MAR-13

Event: Replace engineered hardwood (~530m2).

Туре	Year	Cost	Priority
Lifecycle Replacement	2041	\$37,100	Unassigned

C3020.07 Resilient Flooring** - Sheet Flooring - 1995

Sheet vinyl flooring was installed in corridors circa 1995.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1995	20	MAR-13

Event: Replace sheet vinyl flooring (~1400 m2).

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$112,100	Unassigned

Updated: MAR-13

C3020.07 Resilient Flooring** - Sheet Flooring - Original

Sheet vinyl flooring, reportedly original to the building, is located in patient rooms, storage rooms, and various other rooms throughout the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	20	MAR-13

Event: Replace original sheet vinyl flooring (~3520 m2).

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$281,700	Unassigned

Updated: MAR-13

C3020.07 Resilient Flooring** - VCT - Original

Vinyl composite tile is located within offices on the main floor.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	20	MAR-13

Event: Replace vinyl composite tile (~230 m2).

Concern:

Original vinyl composite tile has cracked, with pieces of tile broken off and missing.

Recommendation:

Replacement of all vinyl composite tile is recommended; installation of sheet vinyl flooring recommended.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2013	\$18,500	High

Carpet tile flooring is located within most offices.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	15	MAR-13

Event: Replace carpet tile (~370m2).
TypeYearCostPriorityLifecycle Replacement2019\$27,000Unassigned
Updated: MAR-13
C3030.06 Acoustic Ceiling Treatment (Susp. T-Bar)** - New
Suspended ceiling tile is located in the corridors and other rooms of the main floor, and appears to have been installed approximately 10 years ago.
RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-13
Event: Replace acoustic ceiling tile (~723 m2).
TypeYearCostPriorityLifecycle Replacement2027\$33,700Unassigned
Updated: MAR-13
C3030.06 Acoustic Ceiling Treatment (Susp. T-Bar)** - Original
Original ceiling tile is located in select offices in the building.
RatingInstalledDesign LifeUpdated4 - Acceptable197125MAR-13
Event: Replace original ceiling tile (~331 m2).
TypeYearCostPriorityLifecycle Replacement2016\$15,500Unassigned
Updated: MAR-13
C3030.07 Interior Ceiling Painting*
The ceilings of patient rooms, and several other rooms within the building, are painted gypsum board.
RatingInstalledDesign LifeUpdated4 - Acceptable19710MAR-13

C3030.09 Other Ceiling Finishes* - Suspended Metal Tile

Suspended metal tile is located in the corridors of the second floor.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	0	MAR-13

Event: Replace metal ceiling tile with suspended acoustic ceiling tile.

Concern:

Maintenance personnel reports the metal ceiling tiles are difficult to clean and maintain; tile supports are no longer functioning adequately.

Recommendation:

Replace metal ceiling tiles with acoustic ceiling tile to match other areas of the building.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2013	\$20,000	Medium

Updated: MAR-13

D1010.01.02 Hydraulic Passenger Elevators**

Two hydraulic elevators. Hydraulic oil pumps SEIM E#14600M (0.75 kW) powered by Imperial Electric model SS-88 electro-hydraulic power units.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	30	MAR-13

Event: Replace hydraulic elevators.

Туре	Year	Cost	Priority
Lifecycle Replacement	2034	\$169,500	Unassigned

S4 MECHANICAL

D2010.04 Sinks**

Sinks in kitchen, kitchenettes, med rooms, utility rooms, and other service rooms are deep, stainless steel with gooseneck, two-handle faucets.

Laundry tub is enameled steel with a swing spout faucet.

One shampoo sink is located in the hair salon and is enameled cast iron.

Janitor sinks are built-up from janitor room floors and are complete with two-handle, hose end spout faucets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace stainless steel sinks (28), laundry tub (1), janitor sinks (3) and shampoo sink (1).

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2016	\$54,800	Unassigned

Updated: MAR-13

D2010.05 Showers**

Patient showers are located in the tub rooms on floors 1/2. Patient showers include Chicago Faucets control valves and are typically drained directly to a floor drain.

The staff shower on the main floor is an enameled steel built-in unit complete with shower head and temperature control valve.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace patient showers (8) and staff shower (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$10,000	Unassigned

Updated: MAR-13

D2010.06 Bathtubs**

One built-in enameled steel bathtub with a Safetymix Visu-temp temperature control system.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-13

Event: Replace bathtub (1)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$1,455	Unassigned

D2010.08 Drinking Fountains/Coolers**

Aquarius refrigerated drinking fountains.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	35	MAR-13

Event: Replace refrigerated drinking fountains (3)

Туре	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$10,400	Unassigned

Updated: MAR-13

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1971

Water closets are typically American Standard, vitreous china with Delta flush-valves.

Lavatories are a mixture of enameled steel with two-handle faucets (staff change rooms), deep stainless steel with automatic Delta gooseneck faucets (public washrooms), and vitreous china with two-handle faucets (staff washrooms).

Urinals are vitreous china with automatic Delta flush-valves.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	35	MAR-13

Event: Replace WCs (78), lavs (15) and urnls (3)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$171,800	Unassigned

Updated: MAR-13

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 2011

Patient room lavatories are enameled steel with two-handle faucets.

Rating	Installed	Design Life	Updated
4 - Acceptable	2011	35	MAR-13

Event: Replace patient room lavs (109)

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2046	\$162,600	Unassigned

Updated: MAR-13

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper domestic water piping with fibreglass insulation. No leaks are reported by building staff.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

D2020.01.02 Valves: Domestic Water**

Domestic water valves are typically bronze and either gate or ball type. Valves are installed throughout the domestic plumbing system to isolate fixture groups and large pieces of equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-13

Event: Replace domestic water valves (109)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$124,500	Unassigned

Updated: MAR-13

D2020.01.03 Piping Specialties (Backflow Preventers)**

Apollo "Defender 4D-100" backflow preventers are installed on the main incoming water line to the building and the incoming fire supply line. A smaller Febco backflow preventer is installed on the irrigation water line. Backflow preventers are tagged as having been inspected by EPCOR.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	20	MAR-13

Event: Replace 150 mm BFPs (4) and 37.5 mm BFP (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$59,700	Unassigned

Updated: MAR-13

D2020.02.02 Plumbing Pumps: Domestic Water** - 1971

Domestic hot water recirculation pumps P7 & P8 are Bell & Gossett 187 W with Armstrong motors.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	20	MAR-13

Event: Replace domestic hot water recirculation pumps (2 @ 187 W)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2016	\$3,700	Unassigned

D2020.02.02 Plumbing Pumps: Domestic Water** - 2008

Domestic hot water pumps P5 & P6 are WEG, 1.1 kW.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2008	20	MAR-13

Event: Replace domestic hot water pumps (2 @ 1.1 kW)

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2028	\$10,000	Unassigned

Updated: MAR-13

D2020.02.04 Domestic Water Conditioning Equipment**

The building is equipped with two Keytech water softeners which have just been returned to use.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	20	MAR-13

Event: Replace water softeners (2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$30,000	Unassigned

Updated: MAR-13

D2020.02.06 Domestic Water Heaters**

The majority of domestic hot water to the building is heated and stored in 8 tank-style, indirect domestic hot water heaters. Two of the eight tanks are Clemmer Steel Craft RT4 and the remaining six are Peerless PP-120DW. Water in the tanks is maintained at a variety of hot water temperatures between 55C and 100C.

A separate "booster" domestic water system is in place to provide extra hot water at 82C to sanitizers located in soiled utility rooms on floors 1/2. This extra hot heater is a gas fired Ruud Commercial with 105 kW input.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	2008	20	MAR-13

Event: Replace indirect DHW heaters (6 - 454 L, 2 - 1893 gal) and gas fired DHW booster heater (1325 Lph)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2028	\$99,300	Unassigned

Updated: MAR-13

D2020.03 Water Supply Insulation: Domestic*

Domestic water piping is insulated with fibreglass insulation. Mechanical room piping is also protected by aluminum cladding.

Rating	Installed	Design Life	Updated
4 - Acceptable	2008	0	MAR-13

D2030.01 Waste and Vent Piping*

Original waste and vent piping had failed and is currently being replaced with PVC.

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

D2030.02.04 Floor Drains*

Majority of floor drains are bronze Smith Rototech. Kitchen is equipped with larger, trench-style, stainless steel floor drains.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

D2030.03 Waste Piping Equipment*

Kitchen drainage is passed through a Smith Rototech cast iron grease interceptor. Grease interceptor is regularly emptied.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D2040.01 Rain Water Drainage Piping Systems*

Cast iron rain water drainage piping. No issues noted by building staff.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D2040.02.04 Roof Drains*

Roof drains are a mix of cast iron Smith Rototech and stainless steel Thaler. Roof drains are equipped with flow control.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D2040.02.06 Area Drains*

Enclosed balcony on floor 2 is equipped with a stainless steel area drain.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

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

Building is heated by 4 Cleaver Brooks Profire MTF-3000 natural gas boilers.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	35	MAR-13
	Capacity S 3516		i ty Unit W

Event: Replace heating boilers (4 @ 879 kW)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2036	\$214,800	Unassigned

Updated: MAR-13

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

Chimney in boiler room is insulated and protected with aluminum cladding. Chimney stack at roof level shows signs of minor damage from condensation of flue gases.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2001	35	MAR-13

Event: Replace boiler vent (12 m)

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$10,000	Unassigned

Updated: MAR-13

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

Chemical pot feeder at P1 provided for heating water treatment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D3020.03.01 Furnaces**

Friendship room furnace is Carrier 58STA070-08 and provides both cooling (through an outdoor condensing unit) and heating (natural gas fired) to the Friendship room near the main lobby.

Rating		Installed	Desig	<u>gn Life</u>	<u>Updated</u>
4 - Accep	otable	2004	25		MAR-13
		Capacity 19	<u>Size</u>	<u>Capaci</u> k	i ty Unit W
Event:	Replace furnace (condensing unit Concern:	19 kW) incl	uding	associa	ated

Insulated chimney directly to exterior.

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2029	\$9,900	Unassigned

D3020.03.02 Chimneys (& Comb. Air): Furnace*

Chimney is vented directly to the outdoors.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	2004	0	MAR-13

D3030.06.01 Refrigeration Compressors** - North

Two compressors provide the majority of cooling for the building. The North compressor (Carlyle 5H60-C109) is directly connected to the cooling coil in the North AHU.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	25	MAR-13
	Capacity		ity Unit W
	211	ĸ	. v v

Event: Replace compressor (211 kW)

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

Updated: MAR-13

D3030.06.01 Refrigeration Compressors** - South

Two compressors provide the majority of cooling for the building. The South compressor (Trane 2E5F58) is directly connected to the cooling coils in the South AHU and the kitchen/laundry MAU.

Rating	Installed	Design Life	<u>Updated</u>
2 - Poor	1971	25	MAR-13
	Capacity	Size <u>Capac</u>	ity Unit
	211	k	W

Event: Replace compressor (211 kW)

Concern:

The South compressor frequently breaks down and has been rebuilt twice according to maintenance staff. Both North and South compressor are the same size however South compressor has significantly higher cooling load due to kitchen and laundry room.

Recommendation:

Replace South compressor. New compressor should be "right sized" for the load served.

Consequences of Deferral:

South portion of the building (including the kitchen and laundry room with high cooling loads) could be left without cooling.

Туре	Year	Cost	Priority
Failure Replacement	2013	\$35,000	Medium

D3030.06.02 Refrigerant Condensing Units** - North

Compressors are connected to Trane RA6003A condensing units (roof mounted).

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	25	MAR-13
	Capacity S	<u>Size Capaci</u>	ty Unit

422 kW

Event: Replace North condensing unit (211 kW)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$30,000	Unassigned

Updated: MAR-13

D3030.06.02 Refrigerant Condensing Units** - South

Compressors are connected to Trane RA6003A condensing units (roof mounted).

Rating	Installed	Design Life	Updated
2 - Poor	1971	25	MAR-13

Event: Replace South condensing unit (211 kW)

Concern:

The South compressor frequently breaks down and has been rebuilt twice according to maintenance staff. Both North and South compressor are the same size however South compressor has significantly higher cooling load due to kitchen and laundry room.

Recommendation:

Replace South condensing unit at same as replacement of South compressor. New system should be "right sized" for the load served.

Consequences of Deferral:

South portion of the building (including the kitchen and laundry room with high cooling loads) could be left without cooling.

Туре	Year	Cost	Priority
Failure Replacement	2013	\$30,000	Medium

D3040.01.01 Air Handling Units: Air Distribution**

The majority of ventilation air supply to the building is through two built-up air handling units (North and South). The units are equipped with heating and cooling coils and "air washer" humidifiers which are no longer in use.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-13
	Capacity 21250		ity Unit /s

Event: Replace air handling units (11,800 L/s & 9,450 L/s)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$81,800	Unassigned

Updated: MAR-13

D3040.01.03 Air Cleaning Devices: Air Distribution*

A combination of pre-filters and larger bag filters are used in AHUs and MAUs. Filters are changed regularly.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

D3040.01.04 Ducts: Air Distribution*

Galvanized duct work continues to meet the needs of the building. Supply air ducts are insulated. Where ducts are visible they are painted. No issues reported by facilities staff.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

D3040.01.05 Duct Accessories: Air Distribution*

Zone control is provided by EH Price zone dampers.

Supplemental heating (primarily to patient rooms) is provided by duct-mounted heating coils.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Air supply in majority of common spaces is through ceiling mounted, square diffusers. Linear slot diffusers have been installed in recently updated dining room areas on floors 1 and 2. Supply air to resident rooms is through ceiling mounted, linear diffusers.

Return air from the majority of common spaces is through ceiling mounted, egg crate returns. Return air from resident rooms is through ceiling mounted, linear grilles.

Exhaust air is typically through ceiling mounted linear grilles.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D3040.03.01 Hot Water Distribution Systems**

Hot water is distributed to perimeter radiation, unit heaters, and cabinet unit heaters through insulated steel hot water piping. Piping in mechanical room is protected by aluminum cladding. Pumps P1 and P2 (Bell & Gossett with AO Smith Motors) distribute this heating water.

Hot water is also distributed up to the roof through similar piping to glycol heat exchangers that serve the AHUs. Pumps P3 and P4 (Bell & Gossett with AO Smith Motors) serve this distribution up to the roof.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	40	MAR-13

Event:	Replace hot water distril gfa)			
	Type	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
	Lifecycle Replacement	2016	\$703,100	Unassigned

Updated: MAR-13

D3040.04.01 Fans: Exhaust**

The building is served by several exhaust fans with a total exhaust air volume of 12,500 L/s. Fans are typically by Trane with Robbins & Myer's motors.

Rating		Installed	De	esign Life	Updated	
4 - Acceptable		1971		30	MAR-13	
		Capacity 1250		e <u>Capaci</u> L	<mark>ty Unit</mark> ∕s	
Event:	Replace exhaust f	ans (7435	<u>m2</u>	gfa)		
	Туре	Ye	ear	Cost	Prior	ity
	Lifecycle Replacemer	nt <u>20</u>	16	\$61,800	Unass	signed
	Updated: MAR-13					
D3040.0	04.03 Ducts: Exhaus	<u>st*</u>				
Galvani	zed exhaust ducts -	painted wh	ere	visible.		
<u>Rating</u>		Installed	De	esign Life	Updated	
4 - Acce	ptable	1971		0	MAR-13	
D2040 (04 05 Air Outlots an	d Inlate: E	vha	uet*		

D3040.04.05 Air Outlets and Inlets: Exhaust*

Air is typically exhausted from the building through wall mounted louvers or exhaust hoods.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D3040.05 Heat Exchangers**

Two shell and tube glycol heat exchangers (Leitch B-5076-2) provide heated glycol to AHU heating coils.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace shell and tube heat exchangers (2 @ 416 LPM)

Туре Cost Priority Year Lifecycle Replacement \$40,000 Unassigned 2016

Updated: MAR-13

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

Two Carrier 48LJE packaged units are pad mounted at the ground level and provide heating and cooling for the main floor offices and cafeteria.

Rating	Installed	Design Life	Updated
4 - Acceptable	1993	30	MAR-13
	Capacity S	Size <u>Capac</u>	ity Unit
	99	k	W

kW

Replace 2 packaged units (21 kW cooling/33 kW Event: heating, 42 kW cooling/66 kW heating)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2023	\$65,800	Unassigned

Updated: MAR-13

D3050.01.04 Unit Air Conditioners** - Dining Rooms

The serveries for the dining rooms on floors 1 and 2 are equipped with Mitsubishi Mr Slim PUY-A18NHA4 split air conditioning units. The condensers are remote (roof mounted).

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2011	0	MAR-13
	Capacity :	<u>Size</u> <u>Capac</u>	ity Unit
	10	k	W

Event: Replace split AC units (2 @ 5kW)

Туре	Year	Cost	Priority
Lifecycle Replacement	2031	\$10,000	Unassigned

				anation (Brothing
<u>D3050.(</u>	01.04 Unit Air Conditione	rs** - Kitchen		
A Thern	noplus KAC-065-V-5 water	cooled air condition pro	vides supplemental cooling to the kitche	n.
Rating	Insta	alled Design Life Up	dated	
4 - Acce	ptable 19	72 30 N	AR-13	
	<u>Cap</u> :	acity Size <u>Capacity U</u> 19 kW	nit	
Event:	Replace kitchen AC uni	<u>t (18 kW)</u>		
	Туре	<u>Year</u> <u>Cost</u>	Priority	
	Lifecycle Replacement	2016 \$10,000	Unassigned	
	Updated: MAR-13			
<u>D3050.(</u>	05.01 Convectors**			
MarkHo	t hot water convectors pro	vide supplemental heat	n entryways and some service areas.	
<u>Rating</u> 4 - Acce		alled Design Life Up 71 40 N	dated AR-13	
Event:	Replace convectors (10)		
	Type Lifecycle Replacement	Year Cost 2016 \$7,300	Priority Unassigned	
	Updated: MAR-13			
D3050.0	05.03 Finned Tube Radia	tion**		
Perimet	er heating (to account for	skin losses) is provided l	by MarkHot finned tube radiation.	
<u>Rating</u> 4 - Acce		alled <u>Design Life</u> Up 71 40 N	dated AR-13	
Event:	Replace finned tube rac	liation (7435 m2 gfa)		
	Type Lifecycle Replacement	Year Cost 2016 \$346,200	Priority Unassigned	
	Updated: MAR-13			

D3050.05.06 Unit Heaters**

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace unit heaters (10)

TypeYearCostPriorityLifecycle Replacement2016\$32,900Unassigned

Updated: MAR-13

D3060.02.01 Electric and Electronic Controls**

Controls are approximately 50% electronic and 50% pneumatic - connected to a central control system. As old pneumatic controls breakdown/wear out they are replaced with electronic.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	30	MAR-13

Event: Replace electronic controls (50% of 7435 m2 gfa)

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2032	\$10,900	Unassigned

Updated: MAR-13

D3060.02.02 Pneumatic Controls**

Honeywell pneumatic controls with associated compressor and DeVilbiss air dryer. Pneumatic controls have been replaced as new equipment has been added and as controls have broken down/worn out over the years. Pneumatics primarily control zone dampers, zone heating coils, and perimeter radiation. Approximately 50% of controls are pneumatic.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-13

Event: Replace pneumatic controls (50% of 7435 m2 gfa)

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2016	\$54,100	Unassigned

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

Cibe BMCS, installed and maintained by Automatic Controls. The majority of building equipment is monitored and controlled via this central system. Facilities staff would like to see monitoring of fire dampers added to the BMCS during the next upgrade of the system.

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

Event: Replace BMCS (7435 m2 gfa)

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2022	\$194,700	Unassigned

Updated: MAR-13

D4010 Sprinklers: Fire Protection*

Quick-response sprinkler heads throughout. Replacement parts cabinet maintained in the boiler room (at incoming fire service).

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D4020 Standpipes*

Black steel sprinkler piping/standpipes.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Type ABC dry chemical fire extinguishers throughout. Some are wall hung, others are located in fire hose cabinets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D4090.04 Dry Chemical Fire Extinguishing Systems (Kitchen Hood)**

Kidde Range Guard RG-4GT dry chemical hood fire suppression system.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	40	MAR-13

Event: Replace kitchen hood fire suprpession system (1)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$13,000	Unassigned

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

The main electrical service is provided by underground conductors from a utility-owned pad mount transformer on the northeast side of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

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

Federal Pacific 1600A, 600/480/220V main distribution located in the main floor electrical room.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1971	40	MAR-13

Event:	Replacement of Main Electrical Switchboards (1ea.)
	Concern:
	Lifecycle replacement, non-availability of parts, with significant consequences of failure Recommendation:
	Replace 1600A main switchgear located in the main floor electrical room.

Туре	<u>Year</u>	Cost	<u>Priority</u>
Failure Replacement	2013	\$32,100	High

Updated: MAR-13

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

Federal Pacific 120/208V distribution panels located throughout the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1971	30	MAR-13

Event: Replace Electrical Branch Circuit Panelboards

<u>(~25ea.)</u>

Concern:

Panelboards have past their life expectancy , non-availability of parts to upgrade existing panels in the future. **Recommendation:**

Replace all branch circuit panelboards throughout the building.

Туре	Year	Cost	Priority
Failure Replacement	2014	\$124,200	Low

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

Original Klockner-Moeller MCC's are out of date, cannot find replacement parts.

Emergency power MCC-E has been upgraded to Square D, 120/208V.

<u>Rating</u>	Installed	Design Life	Updated
3 - Marginal	1971	30	MAR-13

Event: Replace Motor Control Centers (3ea.)

Concern:

Motor Control Centers have past their life expectancy , nonavailability of parts to upgrade existing panels in the future. **Recommendation:**

Replace normal power motor control centers throughout the building. (3ea.)

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2013	\$1,363,000	Low

Updated: MAR-13

D5010.07.02 Motor Starters and Accessories**

N/A No stand alone motor starters, all in MCC's

Rating	Installed	Design Life	Updated
5 - Good	1971	30	MAR-13

D5020.01 Electrical Branch Wiring*

Standard insulated copper to end devices throughout the building. Flexible conduit and cabling is provided to motors and other equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

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

Standard toggle light switches used throughout the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent halogen heat lamps located in the shower rooms on patient care floors. Incandescent ceiling mount fixtures in all patient care rooms, and the recent upgrade to the common areas have halogen pendants.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D5020.02.02.02 Interior Fluorescent Fixtures**

A mix of T-12 and upgraded T-8 fluorescent fixtures throughout the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1971	30	MAR-13

Event: Replace Interior Fluorescent T12 Fixtures (~604ea.)

Concern:

T12 fluorescent fixtures have past their life expectancy , nonavailability of parts to upgrade existing lights in the future. **Recommendation:**

Replace all T-12 fixtures throughout the building.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2013	\$175,300	Medium

Updated: MAR-13

Event: Replace T8 Fixtures (~604ea.)

Туре	Year	Cost	Priority
Lifecycle Replacement	2039	\$249,200	Unassigned

Updated: MAR-13

D5020.02.02.03 Interior Metal Halide Fixtures*

Two metal halide fixtures located in the mechanical room off the main level.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2010	0	MAR-13

D5020.02.03.03 Exit Signs*

Exit lights are incandescent throughout.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

D5020.03.01.03 Exterior Metal Halide Fixtures*

Exterior lights are mounted at the roof around the perimeter of the building, as well as pole mounted fixtures in the parking lot.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Exterior High Pressure Sodium fixtures are located underneath the walkway at the main entrance.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

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

Exterior lights are controlled with a photo-cell and manual override toggle switches.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D5030.01 Detection and Fire Alarm**

A Chubb Edwards "Notifier" fire alarm control is provided by the main entrance vestibule. Initiating devices include: heat and smoke detectors, with manual pull stations at the required exits. Signaling devices include bell strobes.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2005	25	MAR-13

Event: Replace Fire Alarm System

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2030	\$249,900	Unassigned

Updated: MAR-13

D5030.02.02 Intrusion Detection**

DSC Power 832 security system located in the main level electrical room, is tied to all exterior door switches.

Rating	Installed	Design Life	Updated
5 - Good	2000	25	MAR-13

Event: Replace Intrusion Detection System

Туре	Year	Cost	Priority
Lifecycle Replacement	2025	\$227,200	Unassigned

D5030.02.04 Video Surveillance**

There are five(5) video surveillance cameras located within the interior of the building. The IP is monitored from the main security office on the main level.

Rating	Installed	Design Life	Updated
5 - Good	2005	25	MAR-13

Event: Replace Video Camera Surveillance System

Туре	Year	Cost	Priority
Lifecycle Replacement	2030	\$32,900	Unassigned

Updated: MAR-13

D5030.04.01 Telephone Systems*

Phone system for the building is provided by Telus.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

D5030.04.03 Call Systems**

The nursecall system in this building was upgraded in 1992. 50% of that system was upgraded in 2005 to a Telus System.

Rating	Installed	Design Life	Updated
3 - Marginal	1992	25	MAR-13

Event: Replace Entire Nurse Call System

Concern:

The nurse call system, patched together with two different systems, frequently fails and is subject to high maintenance. Spare parts are difficult to acquire. It is expected the system will become obsolete within the next few years.

Recommendation:

The current nurse call system is reaching obsolescence. Replacement is required. An independent evaluation of the system is initially recommended.

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2014	\$250,000	Medium

D5030.04.04 Data Systems*

The main data system panel is located on the main level in the communication room.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

D5030.04.05 Local Area Network Systems*

SpectraLink provides the LAN/Wireless system in the building, with the head end unit located on the main floor.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	2004	0	MAR-13

D5030.05 Public Address and Music Systems**

Two "interM" PA-4000 Public Address Amplifiers covering the Main Building and Service Areas, with microphones and speakers.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	20	MAR-13

Event: Replace Public Address System

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2024	\$50,500	Unassigned

Updated: MAR-13

D5030.06 Television Systems*

The television system head end is located in the communication room on the main level. TV outlets are located on the patient care floors in the common spaces.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-13

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

A stand alone "WAJAX" emergency generator power system, with "ASCO" transfer switch installed on the west side of the building in the summer of 2012.

Rating	Installed	Design Life	Updated
6 - Excellent	2012	35	MAR-13

Event: Replace Stand Alone Generator System

Туре	Year	Cost	Priority
Lifecycle Replacement	2047	\$473,400	Unassigned

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1010.06 Commercial Laundry and Dry Cleaning Equipment*

Various washing machines and clothes dryers are located in the laundry area on the main floor.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

E1030.03 Loading Dock Equipment*

A loading dock leveler is located at the loading dock area of the building.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	0	MAR-13

Event: Loading Dock Lift & Barrier (costs provided by building operator)

Concern:

Rusting and intermittent performance of the loading dock leveler was reported by the building operators. **Recommendation:** Replace original lift and repair loading dock.

Consequences of Deferral:

Medicine, Food, and care product delivery would be jeopardized to the facility.

Туре	Year	Cost	Priority
Failure Replacement	2013	\$78,900	High

E1090.03 Food Service Equipment* - 1971

Walk-in coolers and freezer are original to the building and continually break down. Keeprite cooling coils connected to remote compressors.

<u>Rating</u>	Installed	Design Life	Updated
2 - Poor	1971	0	MAR-13

Event: Replace walk-in coolers & freezer (price provided by Capital Care)

Concern:

Walk-in coolers and freezer are original to the building and are experiencing frequent breakdowns. Building staff also noted that the interior finishes are difficult to clean and are causing concern during health inspections.

Recommendation:

Completely refurbish walk-in coolers and freezer including new cooling equipment, interior finishes and doors.

Consequences of Deferral:

Inability to keep food cold is a health concern.

Туре	Year	Cost	Priority
Failure Replacement	2014	\$230,000	High

Updated: MAR-13

E1090.03 Food Service Equipment* - 1997

Stero commercial dishwasher located in main kitchen. Hot water is not working so cold water with chemicals is currently being used - not ideal.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	1997	0	MAR-13

Event: Replace commercial dishwasher (price provided by Capital Care)

Concern:

Dishwasher can no longer wash dishes with hot water. Cold water is being used with many chemicals. Building staff noted that room finishes are worn and causing issues on Health Inspections.

Recommendation:

Replace dishwasher and upgrade room layout and finishes.

Consequences of Deferral:

Possible health hazard.

Туре	Year	Cost	Priority
Failure Replacement	2014	\$250,000	High

E2010.02 Fixed Casework**

Fixed casework within the building includes washroom and storage cabinetry.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	35	MAR-13

Event: Replace fixed casework (~180 m2/gfa)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$17,100	Unassigned

Updated: MAR-13

E2010.03.01 Blinds**

Various blinds cover exterior perimeter windows throughout the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-13

Event: Replace blinds (~670 m2)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$73,200	Unassigned

S8 SPECIAL ASSESSMENT

K4010.03 Barrier Free Interior Circulation*

All public areas provide barrier free circulation between entrances, elevators, and throughout floor circulation areas.

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

Event: Front Office Renovations (Funds provided by Capital Care)

Concern:

Current work area is not accessible to people with disabilities and the layout is inefficient for staff. Shifting in building structure has also resulted in significant damage to walls and flooring.

Recommendation:

Renovate front office and reception area including layout and interior finishes

Consequences of Deferral:

Trip hazard, and reduced access for people with disabilities.

Туре	Year	<u>Cost</u>	Priority
Barrier Free Access Upgrade	2014	\$315,600	Medium

Updated: MAR-13

K4010.04 Barrier Free Washrooms*

Universal style washrooms through-out follow barrier free design.

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

K4020.01 Safety Code (Fall Prevention)*

Fall prevention systems, such as roof anchors, were not observed on the building.

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

Event: Prepare fall protection plan (Order of Magnitude Estimate).

Concern:

No fall protection systems were observed on site. **Recommendation:**

Prepare a fall projection plan, including installation and construction of fall protection systems such a roof anchors, for any work as required by the Occupational Health and Safety Code, in conjunction with a safety code consultant.

Туре	Year	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2013	\$10,000	High

Updated: MAR-13

K4030.01 Asbestos*

No suspect friable asbestos was observed; however, asbestos could be contained within the spray-applied fire-protection on exposed steel members.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1971	0	MAR-13

Event: Hazardous materials survey (Order of Magnitude

Estimate).

Concern:

Operations personnel could not confirm if an asbestos survey has been completed.

Recommendation:

Conduct hazardous materials survey of the facility. If asbestos is proven present, implement an asbestos management plan in accordance with regulated requirements.

Туре	Year	<u>Cost</u>	Priority
Study	2014	\$15,000	Medium

Updated: MAR-13

K4030.02 PCBs*

No elements containing PCBs were observed within the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

K4030.04 Mould*

No instance of mould were observed within the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

K4030.06 Radioactive Compounds*

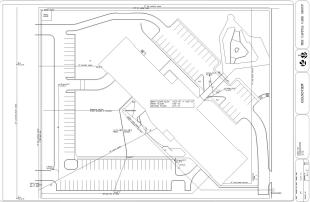
No elements containing radioactive compounds were observed as part of the base building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-13

K5010.01 Site Documentation*

Site plan provided.

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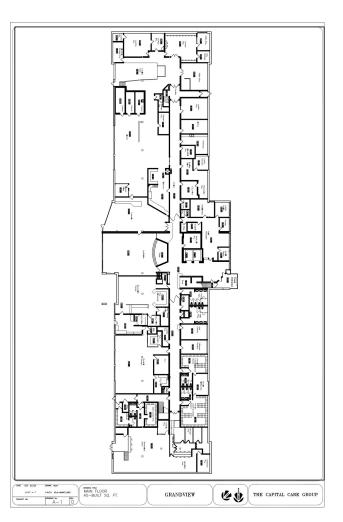


SITE.jpg

K5010.02 Building Documentation*

A facility condition evaluation survey was completed by Morrison Hershfield on October 24, 2012.

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



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