

RECAPP Facility Evaluation Report

David Thompson Regional Health Authority



Drayton Valley Hospital & Care Centre

B1019A

Drayton Valley

Facility Details

Building Name: Drayton Valley Hospital & Care Centre
Address: 4550 Madsen Avenue
Location: Drayton Valley

Building Id: B1019A
Gross Area (sq. m): 9,042.00
Replacement Cost: \$66,838,464
Construction Year: 1984

Evaluation Details

Evaluation Company: PBK Architects
Evaluation Date: October 19 2011
Evaluator Name: Len O'Connor

Total Maintenance Events Next 5 years: **\$6,682,940**
5 year Facility Condition Index (FCI): **10%**

General Summary:

General Summary: This facility is an acute care and long-term care facility offering continuing care and 24-hour emergency services.

Original Construction: 1984, 9000 m2, single and two storey.
Chapel Addition: 1988, 174 m2, single storey

Renovations:

2000: Long term care dining roof and flooring.
2003: Town square renovation.
2005: Lounge flooring.
2008: Whirlpool flooring. Neonatal nursery renovation. Ambulance Bay Roof.
2009: Kitchen and loading dock flooring
2010: 210-216 Acute Care corridor flooring

Site: The facility sight is composed of both hard and soft landscaping. The hard landscape surfaces include concrete sidewalks and patios, concrete driveways, asphalt roadways and parking lot areas (133 stalls), concrete retaining walls, concrete pavers walkways and patio areas. Soft landscaping areas include planting beds, crushed stone, and grass. There are an assortment of shrubs and trees.

Out-Buildings on site include: An equipment garage (4-bay 320 m2), a handi-bus garage (80 m2) (2009), oxygen storage building, and a sun shelter (160 m2).

Other Site Elements: Transformer and garbage enclosures, gazebos, chain link fencing, and bench seating.

Heli-pad: There is one heli-pad (2009) on site.

MR. MOE HAMDON - BOARD CHAIRMAN MR. JIM J. JANSEN - EXECUTIVE DIRECTOR MRS. SYLVIA BOOTH - DIRECTOR, PATIENT SERVICES 542-5321 424-3952

Structural Summary:

Structural General: There concrete foundations, basement walls and slabs on grade, and concrete floors on metal decking. The structural floor and roof frames consists of structural steel assemblies with metal deck. There is floor and roof fireproofing and 2 entrance canopies.

Structural Events: There are no structural events.

Structural Condition: The structure is in good condition.

Envelope Summary:

Envelope General: Envelope veneer elements consists of brick, metal siding, joint sealers, paint and cast-in-place concrete. The exterior backup walls are either masonry or metal stud assemblies. The walls and roof have exterior applies rigid insulation and vapour retarders. Openings have aluminum window assemblies, aluminum storefronts or aluminum curtain walls. Door openings are enclosed with aluminum assemblies or insulated metal doors. There are 2 overhead doors. The roofing have both built-up or SBS membranes.

Retain a roofing consultant to study the current condition of the roof and recommend a plan of action in 2011.

Envelope Events: Brick veneer repairs, joint sealant repairs, roofing report, and roofing repair.

Lifecycle due in this Period: Painting exterior elements, aluminum doors, automatic entrances, re-roofing.

Envelope Condition: The envelope is in acceptable condition.

Interior Summary:

Interior General: Interior partition assemblies are either metal stud with gypsum board or load-bearing masonry. Interior window openings are infilled with either metal or aluminum assemblies with clear glazing. Door openings have steel frames with either wood or metal doors, rated or non-rated, glazed or non-glazed. Interior elements include visual display boards, fabricated compartments, wall and corner guards, hand rails, interior identifying devices, lockers, storage shelving, and toilet and bath accessories. Stair assemblies are concrete with tile finish or steel with grated tops. Interior floor finishes include ceramic and quarry tile, resilient flooring, carpeting and paint. The ceilings have suspended T-bar, painted gypsum board, or exposed and unfinished. There are passenger elevators. There is equipment for labs, medical treatment, loading, waste handling, and therapy. There are fixed casework and blinds components.

Interior Events: Door hardware, OR door operator, floor painting, loading dock equipment, loading dock enclosure, and firestopping.

Interior Lifecycles in this Period: Visual display boards, fabricated compartments, lockers, resilient flooring, suspended ceilings, elevators, and blinds.

Interior Condition: The interior is in acceptable condition.

Mechanical Summary:

The heating plant is comprised of three hot water boilers which serve heating coils in the 7 air handling units and radiant ceiling panels. The heating boilers are original and replacement parts are becoming scarce - boiler replacement should be strongly considered prior to failure. The main heating water piping loop in the mechanical room is leaking in many locations - poor loop water quality is likely the cause. The cooling plant is comprised of a chiller and cooling tower which serve cooling coils in the 7 air handling units. The air handling units deliver air to a combination of variable volume and constant volume systems throughout the hospital. Steam humidifiers in air handling units are served by a central steam boiler. Plumbing fixtures are in good repair. Incoming domestic water piping shows some leakage and mineral build-up before the water softeners.

Overall, the mechanical systems are in acceptable condition.

Electrical Summary:

2000A 600V Main Distribution with Normal and Emergency Sub-Distribution Systems. Two 175kW standby generators, each with approximately 350 hours. Lighting is primarily original T12, but are gradually being replaced with T8 lamps and electronic ballasts. Branch circuit wiring in patient care areas was upgraded to Z-32 standards in 2001. Fire alarm system replaced in 2007. Card access, patient wander, and CCTV systems are in place for building security.

Overall, the electrical systems are in acceptable 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

A1010 Standard Foundations*

Concrete pad and strip footings with reinforcement, sizes vary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

A1030 Slab on Grade*

Slab on grade with reinforcement, thicknesses vary.
Structural slabs with reinforcement.
Perimeter insulation, 50 mm thickness, 1200 mm below grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

A2020 Basement Walls (& Crawl Space)*

Cast-in-place concrete with reinforcement for basement wall, service tunnel, and elevator shafts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B1010.01 Floor Structural Frame (Building Frame)*

Concrete columns and beams with reinforcement.
Steel columns, beams and OWSJ; sizes vary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

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

Cast-in-place concrete walls with reinforcement.
Masonry, load bearing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B1010.03 Floor Decks, Slabs, and Toppings*

Concrete topping with reinforcement on metal decking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B1010.05 Mezzanine Construction*

Mechanical Penthouse: Cast-in-place concrete on metal deck on structural steel assembly.
 Mechanical Pads: Cast-in-place concrete with reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B1010.09 Floor Construction Fireproofing*

Spray fireproofing on structural steel decking, joists and beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

B1010.10 Floor Construction Firestopping*

Firestopping was not observed at all rated floor or wall penetrations.
 Reference from C1010.07 Interior Partition Firestopping*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

Event: Determined Firestopping Requirements

Concern:

Firestopping not observed at all rated wall and floor penetration locations.

Recommendation:

Provide study to survey firestopping requirements.
 Identify required locations.
 Recommend firestopping systems for each condition.
 Provide estimate of probable costs.

Consequences of Deferral:

Deferred fire safety.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2012	\$9,000	Medium

Updated: APR-12

Event: Upgrade Firestopping to Code

Concern:

Fire safety.

Recommendation:

Install firestopping systems as recommended in the study.

Consequences of Deferral:

Deferred fire safety.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2013	\$60,000	Medium

Updated: APR-12

B1020.01 Roof Structural Frame*

Steel columns, beams, OWSJ, metal decking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B1020.02 Structural Interior Walls Supporting Roofs*

Cast-in-place concrete walls with reinforcement.
Masonry, load bearing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

B1020.03 Roof Decks, Slabs, and Sheathing*

Metal Decking on structural steel assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

B1020.04 Canopies*

Two (2) canopies, main entrance north and south.
Structural steel frame, prefinished metal cladding and soffits, built-up roofing roofing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

B1020.06 Roof Construction Fireproofing*

Spray-on fireproofing to underside of metal deck, OWSJ and beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Brick veneer, running bond, red-brown mix, soldier course banding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	75	APR-12

Event: Repair 20 m2 Brick Masonry: Ext. Wall Skin

Concern:

Staining: At exterior gazebos, gazebo room slopes to building face, causing staining and fungus growth.

Loose Sections: There are some areas with broken brick veneer

Repointing: There are some areas with open joints between coursing and at corners.

Recommendation:

Staining: \$30,000.00

-Remove all gazebos.

-Remove staining and fungus growth from masonry surface.

Replace 20 m2 brick veneer, if required.

-Remove 3-4 brick units to investigate condition of wall cavity.

-Report cavity condition to facility manager.

Loose Sections: Replace with new brick veneer. \$5,000.00

Repointing: Remove loose mortar and replace with new at coursing and at corners. \$15,000.00

Consequences of Deferral:

Higher maintenance costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2013	\$50,000	Medium

Updated: APR-12

B2010.01.06.03 Metal Siding**

Prefinished metal siding panels, flat panel profile, interlocking, copper colour.

Located on canopy fascias, clerestory walls, and adjacent walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1999	40	APR-12

Event: Replace 310 m2 Metal Siding

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$44,100	Unassigned

Updated: APR-12

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

Stucco soffits at floor overhang, smooth texture, off white, with control joints, on metal lath and furring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	75	APR-12

B2010.01.09 Expansion Control: Ext. Wall*

Expansion control joints in brick veneer and stucco assemblies.
Masonry joints filled with backing rod and joint sealers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	75	APR-12

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

Joint sealers at perimeter of openings and at masonry expansion control joints, with and without backing rods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	20	APR-12

Event: Replace 2000 m Joint Sealers (caulking): Ext. Wall

Concern:

Joint sealant is hard, cracked, or missing.

Recommendation:

Remove existing sealant, clean substrate, replace backer rod if required, and install new exterior grade sealant.

Colour match sealant to mortar colour for masonry joints.

Colour match sealant to window or door frames at openings.

Consequences of Deferral:

Higher maintenance costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$67,000	Medium

Updated: APR-12

B2010.01.13 Paints (& Stains): Ext. Wall**

Window Sun Shades: 38 x 89 cedar on edge, stained dark brown, mounted on metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	APR-12

Event: Replace 200 m2 Paints (& Stains): Ext. Wall

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$4,100	Unassigned

Updated: APR-12

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

Cast-in-place concrete with reinforcement at exterior courtyard, air vents, mechanical equipment chases, sunken patio, stairwells, and elevator.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B2010.02.03 Masonry Units: Ext. Wall Const.*

Load bearing masonry assemblies with reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B2010.02.04 Load-Bearing-Metal Studs: Ext. Wall*

Load-bearing metal stud assemblies with gypsum board.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

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

Interior applied vapour retarder, internal bat insulation, exterior 50 mm rigid insulation

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

B2010.05 Parapets*

Dimensional wood framed, plywood sheathing, insulated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

B2010.06 Exterior Louvers, Grilles, and Screens*

Aluminum with painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

B2010.09 Exterior Soffits*

Stucco: Tradition stucco assembly with reinforcement on metal framing, off white colour, at 2nd floor overhangs.
 Prefinished Metal: linear strip, copper finish, to match wall panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

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

Aluminum window assemblies with sealed glass units, fixed, with dark anodized finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace 342 m2 Aluminum Windows (Glass & Frame)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$429,200	Unassigned

Updated: APR-12

B2020.02 Storefronts: Windows**

Aluminum window assemblies with sealed glass units, with horizontal intermediate rail, with dark anodized finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replacement 224 m2 Storefronts: Windows

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$234,000	Unassigned

Updated: APR-12

B2020.03 Glazed Curtain Wall**

Aluminum window assemblies with sealed glass units, with dark anodized finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace 234 m2 Glazed Curtain Wall

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$294,000	Unassigned

Updated: APR-12

B2030.01.01 Aluminum-Framed Storefronts: Doors**

Aluminum assemblies with single tempered glass unit, with dark anodized finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 6 Aluminum-Framed Storefronts: Doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$22,100	Unassigned

Updated: APR-12

B2030.01.06 Automatic Entrance Doors**

Paired Auto Entrance Assemblies, 3 pairs, anodized aluminum composition, bi-parting, with side glass panels.
Single Auto Entrance Assemblies, anodized aluminum composition, slide to 1 side, with side glass panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 7 Automatic Entrance Doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$158,100	Unassigned

Updated: APR-12

B2030.02 Exterior Utility Doors**

Exterior metal door and frame assemblies with hardware to suit condition, insulation, painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace 18 Exterior Utility Doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$16,600	Unassigned

Updated: APR-12

B2030.03 Large Exterior Special Doors (Overhead)*

Assembly: Insulated metal panel door assembly with overhead track and vision panels.
Motorized system on photo controllers.
Motors are original.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	0	APR-12

B3010.01 Deck Vapour Retarder and Insulation*

Vapour retarder on gypsum board with 2 layers of rigid board insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel) - 1984**

Built-up roofing assembly over insulated deck with pea gravel ballast.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Replace 4528 m2 Built-up Bituminous Roofing (Asphalt & Gravel)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$871,200	Unassigned

Updated: APR-12

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel) - 1988**

Chapel Addition: Built-up roofing assembly over insulated deck with pea gravel ballast.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1988	25	APR-12

Event: Replace 174 m2 Built-up Bituminous Roofing (Asphalt & Gravel) - Chapel

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$33,500	Unassigned

Updated: APR-12

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel) - Long Term**

Long Term Care Leaky Roof Area: Built-up roofing assembly over insulated deck with pea gravel ballast.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2011	25	APR-12

Event: Replace 330 m2 Built-up Bituminous Roofing (Asphalt & Gravel)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$63,500	Unassigned

Updated: APR-12

B3010.04.04 Modified Bituminous Membrane Roofing (SBS) - 2000**

Modified bituminous membrane, over insulated deck, off-white colour sand finish, over sloped glazing replacement area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	25	APR-12

Event: Replace 40 m2 Modified Bituminous Membrane Roofing (SBS)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$7,700	Unassigned

Updated: APR-12

B3010.04.04 Modified Bituminous Membrane Roofing (SBS) - 2008**

Ambulance & Emergency Entrance: Modified bituminous membrane, over insulated deck, off-white colour sand finish, over ambulance and main entrance areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	25	APR-12

Event: Replace 115 m2 Modified Bituminous Membrane Roofing (SBS)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$22,100	Unassigned

Updated: APR-12

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Metal stud assemblies, with and without sound insulation, rated and non-rated, gypsum board face panels, taped.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

C1010.03 Interior Operable Folding Panel Partitions**

Folding door assembly, 200 mm plastic laminate face, stack to 1 side.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	30	APR-12

Event: Replace 10 m2 Interior Operable Folding Panel Partitions

Concern:

Existing structure is 20 years old and very dysfunctional, taking two staff members to secure it and unsure if locking system is working. This is used on a daily basis.

Recommendation:

Replace sliding partition in Tomahawk lounge.

Consequences of Deferral:

Higher maintenance costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2016	\$12,600	Low

Updated: APR-12

C1010.05 Interior Windows*

Metal frame assemblies with painted finish, rated and non-rated, with wire or tempered glass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	80	APR-12

C1010.06 Interior Glazed Partitions and Storefronts*

Aluminum assemblies, dark anodized finish, with tempered glass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	80	APR-12

C1010.07 Interior Partition Firestopping*

Firestopping not observed at all locations.
Refer to B1010.10 Floor Construction Firestopping*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

C1020.01 Interior Swinging Doors (& Hardware)*

Institutional grade hardware; hinges, locksets, closures, stops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	40	APR-12

Event: Upgrade 260 Interior Swinging Doors (& Hardware) - Rekey Building

Concern:

The facility is not fully secured as some locks cannot be replaced and a master key tracking system was not initiated.

Recommendation:

The entire facility needs to be re-keyed and a tracking system initiated. The system is obsolete as some locks are discontinued and difficult to replace or access replacement parts. Numerous keys were given out and no accounting system was in place to track them. This may require changing the entire lockset and not just the lock cores.

Consequences of Deferral:

Deferred Safety.
Higher operational costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$40,000	Low

Updated: APR-12

C1020.02 Interior Entrance Doors*

Interior automatic doors to operating room. Sensors upgraded in 2009.
Metal frame and door assemblies, painted finish, hardware to suit opening condition.
Metal frames with wood door, flat and fluted veneers, painted and clear finishes, with hardware to suit opening condition.
Install new door operators and door safeties as required by code in 2011.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1984	0	APR-12

C1020.03 Interior Fire Doors*

Metal door and frame assemblies, rating varies, with and without vision wire glass, paint finish, with hardware to suit opening condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

C1020.04 Interior Sliding and Folding Doors*

Folding closet doors, wood, painted finish, top hung.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

C1030.01 Visual Display Boards**

Marker boards and tack boards with aluminum trim, sizes vary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

Event: Replace 15 ea Visual Display Boards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$10,700	Unassigned

Updated: APR-12

C1030.02 Fabricated Compartments (Toilets/Showers)**

Fabricated toilet compartments, metal with painted finish and stainless steel hardware.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 6 ea Fabricated Compartments (Toilets/Showers)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$8,000	Unassigned

Updated: APR-12

C1030.05 Wall and Corner Guards*

Metal and plastic assemblies, height varies, colour varies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	15	APR-12

C1030.06 Handrails*

Metal pipe handrails with painted finish.
Pre-manufactured plastic handrailings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

C1030.08 Interior Identifying Devices*

Laminated plastic room and directional signs, beige background with black lettering, sizes vary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

C1030.10 Lockers**

Metal locker assemblies, painted finish, single and two tier, colours vary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 190 Lockers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$103,400	Unassigned

Updated: APR-12

C1030.12 Storage Shelving*

Metal storage shelves, modular and fixed assemblies, with painted finish.
Stainless steel storage shelving, fixed and mobile.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

C1030.14 Toilet, Bath, and Laundry Accessories*

Components include mirrors, tissue dispensers, soap dispensers, and grab bars.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

C2010 Stair Construction*

Cast-in-place concrete construction with painted metal balustrades and handrails. (Stairwells)
Steel stair construction with grated treads and painted metal balustrades and handrails. (mechanical Room)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

C2020.01 Tile Stair Finishes*

Quarry tile treads and risers, stairwell locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	60	APR-12

C2020.08 Stair Railings and Balustrades*

Balustrade and Handrail: Metal tube, square and rectangular, sizes vary, with painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

C3010.01 Concrete Wall Finishes (Unpainted)*

Unpainted concrete walls in basement areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

C3010.06 Tile Wall Finishes**

Tile wall finished to showers, baths and janitor room areas, 50x50 mm, brown marble colouring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace 280 m2 Tile Wall Finishes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$77,300	Unassigned

Updated: APR-12

C3010.11 Interior Wall Painting*

Interior wall painting, colours vary, low to high sheen; repainting program ongoing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	10	APR-12

C3010.14 Other Wall Finishes*

Painted plaster wall finish over concrete in stairwells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

C3020.01.02 Painted Concrete Floor Finishes*

Painted concrete floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	10	APR-12

Event: Repaint 446 m2 Painted Concrete Floor Finishes

Concern:

Paint finish has worn off of the concrete floors.

Recommendation:

Prepair and repaint concrete floor surfaces.

Consequences of Deferral:

Higher Maintenance Costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$22,400	Low

Updated: APR-12

C3020.02 Tile Floor Finishes - Quarry 1984**

Quarry Tile: 100 x 200 mm. brown-red colour, to stairwells, some room areas, to some kitchen areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

Event: Replace 262 m2 Tile Floor Finishes - Quarry 1984

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$77,000	Unassigned

Updated: APR-12

C3020.02 Tile Floor Finishes - Ceramic 1984**

Ceramic Tile: 50 x 50 mm tile, colours vary, to showers, washrooms, and janitor rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

Event: Replace 382 m2 Tile Floor Finishes - Ceramic 1984

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$70,300	Unassigned

Updated: APR-12

C3020.07 Resilient Flooring - 1984**

Resilient sheet flooring with integral base.
Two tone in corridors. Single colour in room areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

Event: Replace 4000 m2 Resilient Flooring - 1984

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$368,000	Unassigned

Updated: APR-12

C3020.07 Resilient Flooring - 2000**

Resilient sheet flooring with rubber base.
Single colour in room area.
Interior atrium, dining, corridor, physio areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	20	APR-12

Event: Replace 600 m2 Resilient Flooring - 2000

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$55,200	Unassigned

Updated: APR-12

C3020.07 Resilient Flooring - 2006**

Resilient sheet flooring with integral base.
Two tone in corridors. Single colour in room areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	20	APR-12

Event: Replace 960 m2 Resilient Flooring - 2006

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$88,300	Unassigned

Updated: APR-12

C3020.07 Resilient Flooring - 2010**

Resilient Sheet flooring with integral base.
Acute care, 2nd floor, patient room areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2010	20	APR-12

Event: Replace 800 m2 Resilient Flooring (Acute Care)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$73,600	Unassigned

Updated: APR-12

C3020.07 Resilient Flooring - 2010 Kitchen**

Resilient sheet flooring with integral cove base and non-slip surface.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2010	20	APR-12

Event: Replace 152 m2 Resilient Flooring - 2010 Kitchen

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$14,000	Unassigned

Updated: APR-12

C3020.08 Carpet Flooring**

Commercial grade carpeting, low pile, colours vary, various areas, with rubber base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	15	APR-12

Event: Replace 70 Carpet Flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$5,300	Unassigned

Updated: APR-12

C3020.14 Other Floor Finishes*

Grated metal floor assembly in mechanical room area, painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

C3030.01 Concrete Ceiling Finishes (Unpainted)*

Unpainted concrete in basement locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	100	APR-12

C3030.06 Acoustic Ceiling Treatment (Susp. T-Bar) - 1984**

Acoustic ceiling assemblies, suspended, 610x610 mm and 610x1220 mm grids.
Tile is generally fissured. Kitchen has washable tile. Some parabolics is specialty areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Replace 2700 m2 Acoustic Ceiling Treatment (Susp. T-Bar) - 1984

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$135,500	Unassigned

Updated: APR-12

C3030.06 Acoustic Ceiling Treatment (Susp. T-Bar) - 2000**

Acoustic ceiling assemblies, suspended, 610x610 mm and 610x1220 mm grids.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	25	APR-12

Event: Replace 1200 m2 Acoustic Ceiling Treatment (Susp. T-Bar)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$60,200	Unassigned

Updated: APR-12

C3030.07 Interior Ceiling Painting*

Painted gypsum board, low to high sheen, colour white.
Room painting is completed when required on a continuous basis.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

C3030.09 Other Ceiling Finishes*

Stairwells have a cementitious texture finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

D1010.01.02 Hydraulic Passenger Elevators**

Passenger Elevators: 3 assemblies, 1810 kg or 25 person rating, serving 2 or 3 floors, by Armor
Finishes: Plastic laminate wall panels, resilient sheet flooring, stainless steel trim, and smooth lens ceiling.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 3 Hydraulic Passenger Elevators

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$450,000	Unassigned

Updated: APR-12

S4 MECHANICAL

D2010.04 Sinks**

Enameled steel janitor sink in main mechanical room. Stainless steel scrub sinks located outside operating rooms. Vitreous china pedestal mop sink and tiled floor sink in janitor room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 80 sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$105,400	Unassigned

Updated: APR-12

D2010.05 Showers**

Ceramic tile showers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 32 showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$62,700	Unassigned

Updated: APR-12

D2010.06 Bathtubs**

Fibreglass medical bathtubs with integral temperature control complete with patient lifts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 8 bathtubs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$16,100	Unassigned

Updated: APR-12

D2010.08 Drinking Fountains/Coolers**

Stainless steel drinking fountains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12

Event: Replace 11 drinking fountains

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$9,075	Unassigned

Updated: APR-12

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

Floor mounted Crane vitreous china water closets with Teck II flush valves. Wall hung lavatories with two handle operation. Vitreous china urinals with flush valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12

Event: Replace 96 WC, 128 Lav, 2 Urnl

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$197,090	Unassigned

Updated: APR-12

D2020.01.01 Pipes and Tubes: Domestic Water*

Evidence of high mineral content of incoming domestic water as shown by leaking seal at main water meter and small leaks/mineral build-up in other locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12



Leaking seal at main water meter.

D2020.01.02 Valves: Domestic Water**

Gate valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace 53 domestic water valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$57,900	Unassigned

Updated: APR-12

D2020.01.03 Piping Specialties (Backflow Preventers)**

Backflow preventer on incoming water service. There is a hole at one end that requires repeated patching.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	20	APR-12



Backflow preventer with location requiring regular repairs (rusty spot near flange).

Event: Replace backflow preventer

Concern:

Backflow preventer requires regular maintenance to repair a hole that continually re-opens.

Recommendation:

Replace the backflow preventer to remove this requirement for regular maintenance.

Consequences of Deferral:

Continued requirement for patching, possibility of serious leak in main water supply to building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$4,400	Low

Updated: APR-12

D2020.02.02 Plumbing Pumps: Domestic Water**

Domestic cold water is provided to the building by 2 booster pumps. 1 pump is high pressure (brand: Arthur S Leitch), 1 pump is low pressure (brand: Leroy Somer). Pumps are past recommended design life therefore the possibility of failure is increased however both pumps are still functioning. Grundfos and WEG domestic hot water pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

Event: Replace 2 domestic water pumps

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$42,900	Unassigned

Updated: APR-12

D2020.02.03 Water Storage Tanks**

Domestic hot water stored in 3 - 1500 gal Nickelshield tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 3 storage tanks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$206,300	Unassigned

Updated: APR-12

D2020.02.04 Domestic Water Conditioning Equipment**

Water is softened by 3 USF Watergroup water softeners.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1984	20	APR-12

Event: Replace 3 water softeners

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$32,000	Unassigned

Updated: APR-12

D2020.03 Water Supply Insulation: Domestic*

Fibreglass jacket insulation, painted blue. Insulation has been removed in some locations to accommodate pipe repairs and in some locations has not been replaced. Repair under \$1000 - maintenance activity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

D2030.01 Waste and Vent Piping*

Cast iron waste and vent piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

D2030.02.04 Floor Drains*

Brass floor drains (Zurn).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

D2040.01 Rain Water Drainage Piping Systems*

Cast iron rain water drainage piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

D2040.02.04 Roof Drains*

Cast iron roof drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

D2090.10 Nitrous Oxide Gas Systems**

Nitrous oxide storage in 2nd floor storage room. GeneSYS manifold system for distribution.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace nitrous gas system (9042 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$500,000	Unassigned

Updated: APR-12

D2090.11 Oxygen Gas Systems**

Liquid Air oxygen gas system with oxygen stored at ground level outside the building (near cooling tower).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace replace oxygen gas system (9042 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$500,000	Unassigned

Updated: APR-12

D2090.13 Vacuum Systems (Medical and Lab)**

Class 1 medical vacuum system recently upgraded.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2011	30	APR-12

Event: Replace medical vacuum system (9042 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2041	\$500,000	Unassigned

Updated: APR-12

D2090.16 Medical Air System*

Class 1 medical air system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2012	0	APR-12

D3010.02 Gas Supply Systems*

Gas provided to the building via 2 exterior gas meters. 26.77 psi incoming gas pressure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	60	APR-12

D3020.01.01 Heating Boilers & Accessories: Steam**

Bryan Boilers steam boiler (with Honeywell controls) serves humidifiers (960 MBH output).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	281	kW	

Event: Replace steam humidification boiler (960 MBH)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$85,000	Unassigned

Updated: APR-12

D3020.01.03 Chimneys (& Comb. Air): Steam Boilers**

No issues with steam boiler chimney.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1984	35	APR-12

Event: Replace steam boiler chimney (10 m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$10,000	Unassigned

Updated: APR-12

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

Building is heated by 3 - 5235 MBH input - Volcano boilers (original). Boilers are still functional but are nearing end of design life and replacement parts are no longer available. Early lifecycle replacement should be considered to avoid heating system failure during winter months.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	4602	kW	

Event: Replace 3 boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$460,350	Unassigned

Updated: APR-12

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

Three boiler chimneys connected to main heating boilers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 3 hot water boiler chimneys (10 m each)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$30,000	Unassigned

Updated: APR-12

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

Chemical pot feeders on main heating boilers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

D3030.02 Centrifugal Water Chillers**

Trane Centravac centrifugal chiller (20 ton) provides cooling to the building. Chiller is charged with R-11 refrigerant however a phase-out to R-123 is not recommended due to the age of the chiller. The chiller is past the end of its design life.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Replace centrifugal chiller

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$458,250	Unassigned

Updated: APR-12

D3030.05 Cooling Towers**

Baltimore Air Coil cooling tower located outside of building at ground level. Remote cooling tower sump located in main mechanical room. Cooling tower is showing signs of regular wear and tear with some rusty spots and moss.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Add conductivity meter to cooling tower

Concern:

Cooling tower shows moss and corrosion.

Recommendation:

First perform study to review cooling tower performance, if study shows poor performance installation of a conductivity meter may be recommended. This will inhibit corrosion and moss growth.

Consequences of Deferral:

Continued poor performance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2013	\$5,000	Medium

Updated: APR-12

Event: Replace cooling tower

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$150,000	Unassigned

Updated: APR-12

Event: Study cooling tower performance

Concern:

Moss and corrosion on cooling tower likely results in poor performance.

Recommendation:

Perform a study to monitor cooling tower performance. Installation of a conductivity meter to control cooling tower chemical use should be investigated to minimize moss growth.

Consequences of Deferral:

Poor performance and eventual failure due to corrosion.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2012	\$5,000	Low

Updated: APR-12

D3040.01.01 Air Handling Units: Air Distribution**

Building is conditioned with 7 Pace air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 7 air handling units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$589,840	Unassigned

Updated: APR-12

D3040.01.03 Air Cleaning Devices: Air Distribution*

Air filters located in air handling units - changed as a part of regular maintenance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

D3040.01.04 Ducts: Air Distribution*

Galvanized sheet metal ducting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

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

APUs 1, 4, 7 equipped with VAV boxes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 56 VAV boxes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$57,850	Unassigned

Updated: APR-12

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Enameled steel ceiling diffusers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

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

Steam distribution piping from boiler to humidifiers mounted in APUs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace steam distribution piping (18 m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$1,400	Unassigned

Updated: APR-12

D3040.03.01 Hot Water Distribution Systems**

Hot water distribution system pumps are leaky. Isolation valves do not properly seat which prevents any repairs to the system while it is operational.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	40	APR-12

Event: Isolation Heating Valve Replacement

Concern:

If work is not complete and we have to change seals while heating system is hot which is a risk issue.

Recommendation:

The main heating control valves and isolation valves have washed out and need to be replaced as a project as the heating system needs to drain to complete this work.

Consequences of Deferral:

Inability to shutdown heating system in demand months

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$18,000	High

Updated: APR-12

Event: Replace hot water distribution system (9042 m2 GFA)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$841,000	Unassigned

Updated: APR-12

D3040.03.02 Chilled Water Distribution Systems**

Chilled water distribution pumps are original and are showing some signs of minor leakage. Should be replaced at end of design life.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace chilled water distribution system (9042 m2 GFA)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$460,400	Unassigned

Updated: APR-12

D3040.03.03 Condenser Water Distribution Systems Pumps*

Etatech pumps (2) are original. Seal is leaking on P22.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	40	APR-12



P22 leaky seal

Event: Replace leaky condenser pump (25 HP)

Concern:

Seal on P22 (condenser pump) is leaking.

Recommendation:

Replace mechanical seal.

Consequences of Deferral:

Continued leaking, water damage, and possible failure of condenser water system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$21,450	Low

Updated: APR-12

D3040.04.01 Fans: Exhaust**

Combination of roof mounted and exterior wall mounted exhaust fans (19 in total).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 19 exhaust fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$62,020	Unassigned

Updated: APR-12

D3040.05 Heat Exchangers**

Domestic hot water heated via plate and frame heat exchangers (brand: Alfa Laval) connected to main heating loop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 3 heat exchangers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$41,500	Unassigned

Updated: APR-12

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

Packaged roof top unit serves chapel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Replace chapel rooftop unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$31,700	Unassigned

Updated: APR-12

D3050.03 Humidifiers**

Steam humidifiers included in air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Replace 7 humidifiers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$75,600	Unassigned

Updated: APR-12

D3050.05.06 Unit Heaters**

Hydronic unit heaters in select mechanical rooms and perimeter spaces. Cabinet unit heaters in stairwells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 29 unit heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$57,420	Unassigned

Updated: APR-12

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

Radiant ceiling panels throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace 968 m radiant panel

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$143,285	Unassigned

Updated: APR-12

D3060.02.01 Electric and Electronic Controls**

Controls gradually being phased from pneumatic to electronic. Electronic controls are by Reliable Controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace electronic controls (9042 m2 GFA)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$61,730	Unassigned

Updated: APR-12

D3060.02.02 Pneumatic Controls**

Johnson dual pneumatic compressor and Sullivan Palatek refrigerated air dryer serve pneumatic controls. Building staff noted that air dryer may be replaced soon.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace pneumatic controls (9042 m2 GFA)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$212,970	Unassigned

Updated: APR-12

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

BMCS by Reliable Controls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Replace BMCS (9042 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$225,680	Unassigned

Updated: APR-12

D4010 Sprinklers: Fire Protection*

Reliable sprinkler alarm, sprinkler system serves portions of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	60	APR-12

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Amerex dry chemical fire extinguishers - some hose cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

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

Dry chemical fire suppression system in main kitchen hood.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace Fire Extinguishing System

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$12,400	Unassigned

Updated: APR-12

D4090.07 Fire Pumps & Water Storage Tanks*

Vertical in-line 45 psi fire booster pump, ULC listed fire pump model number 4x6 VBD.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	40	APR-12

Event: Replace jockey pump

Concern:

Mechanical seal on sprinkler jockey pump is leaking.

Recommendation:

Replace jockey pump.

Consequences of Deferral:

Continued leaking and possibility of leak growing which would compromise the integrity of the sprinkler system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$14,200	Low

Updated: APR-12

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

Utility owned transformers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

D5010.02 Secondary Electrical Transformers (Interior)** - 400 kVA

Westinghouse dry-type transformers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace Distribution Transformers [2 x 400 kVA]

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$40,000	Unassigned

Updated: APR-12

D5010.02 Secondary Electrical Transformers (Interior)** - 75 kVA

Westinghouse dry-type transformers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace Secondary Electrical Transformers (Interior) [2 x 75kVA]

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$18,000	Unassigned

Updated: APR-12

D5010.03 Main Electrical Switchboards (Main Distribution)** - 1984

2000A 600V Westinghouse MDP.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	40	APR-12

Event: Replace Main Distribution Panel

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2024	\$120,000	Unassigned

Updated: APR-12

D5010.03 Main Electrical Switchboards (Main Distribution) - 2006**

'Square D' Tie-Main-Tie for Utility and Emergency Power installed in 2006.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	40	APR-12

Event: Replace Tie-Main-Tie Breakers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2046	\$76,000	Unassigned

Updated: APR-12

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

Westinghouse, primarily 225A bus. Some have Cutler Hammer breakers installed (not CSA approved for installation in Westinghouse panels).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	30	APR-12

Event: Replace 23 Electrical Branch Circuit Panelboards

Concern:

Westinghouse branch circuit panelboards and breakers are no longer manufactured or available.

Recommendation:

Replace all 120/208V branch circuit panelboards and breakers with new.

Consequences of Deferral:

No replacement parts; in event of panel or breaker failure area of hospital could be down until new panelboard can be installed.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$57,500	Low

Updated: APR-12

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

Westinghouse MCC Cabinets. 2 Normal and 2 Emergency.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 4 (Motor) Control Centers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$104,000	Unassigned

Updated: APR-12

D5020.01 Electrical Branch Wiring*

Z-32 upgrade to patient care areas in 2001.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	50	APR-12

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

Low voltage lighting control. 1st generation Douglas cylinder style relays, time clock interface.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	30	APR-12

Event: Replace Eight (8) Lighting Panelboards and LV Relay Cabinets

Concern:

Westinghouse panelboards and breakers are no longer manufactures of available. Westinghouse low voltage relays are prone to failure. *Panelboard and LVRC are one unit and should be replaced together.

Recommendation:

Replace 347/600V lighting panels and LVRCs with new lighting panel and programmable relay cabinet.

Consequences of Deferral:

Breaker or relay failure could cause lighting outage in significant area of hospital.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2014	\$46,000	Low

Updated: APR-12

D5020.02.02.02 Interior Fluorescent Fixtures**

T12 3' and 4' fixtures. Ballasts and lamps are being replaced with new electronic T8 as they fail.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1984	30	APR-12

Event: Replace T12 Luminaires [7234 m2]

Concern:

T12 luminaires are inefficient and replacement lamps and ballast are no longer manufactured.

Recommendation:

Replace T12 luminaires with T8 or T5 luminaires.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$490,000	Low

Updated: APR-12

Event: Replace T8 Fluorescent Luminaires [1808 m2]

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$156,000	Unassigned

Updated: APR-12

D5020.02.03.01 Emergency Lighting Built-in*

Emergency lighting provided from 347/600V emergency (generator) source

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12

D5020.02.03.03 Exit Signs*

Exit signs original to construction. All have been retrofit with LED lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

D5020.02.05 Special Purpose Lighting*

Exam lights, operating room lights, etc.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

D5020.02.11 Operating Room Lighting*

Incandescent halogen lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Wall pack lighting, 175W

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

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

Photocell and time clock controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

D5030.01 Detection and Fire Alarm**

Simplex 4100U installed in 2007. FA system controls clocks and perimeter door monitoring. System c/w a Simplex PC-based TrueSite graphic.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	25	APR-12

Event: Replace Fire Alarm System [9042 m2]

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$260,000	Unassigned

Updated: APR-12

D5030.02.03 Security Access**

Numerous upgrades and additions in 2008/2009. Altronics card reader system with 5 card reader locations. Magnetic locks on exterior doors. Perimeter security is monitored by the Simplex fire alarm panel. Patient wander "wanderguard" system installed in Geriatrics wing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	25	APR-12

Event: Replace Security Access [9042 m2]

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$47,000	Unassigned

Updated: APR-12

D5030.02.04 Video Surveillance**

Eight Panasonic POE cameras with monitors. Recording done remotely from Red Deer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	25	APR-12

Event: **Replace Video Surveillance System [8 cameras, DVR, Monitors]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$126,000	Unassigned

Updated: APR-12

D5030.03 Clock and Program Systems*

Clock system operated for the Simplex fire alarm panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

D5030.04.01 Telephone Systems*

Local handsets used for phone operations and paging. Centrex system offsite (TELUS). System replacement scheduled for autumn of 2012.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

D5030.04.03 Call Systems**

Nurse call system replaced in 2010 with Rauland Responder IV.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	25	APR-12

Event: **Replace Call Systems [4000 m2]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$156,000	Unassigned

Updated: APR-12

D5030.04.04 Data Systems*

Data cabling upgrade to CAT6 wiring in 2007.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	25	APR-12

D5030.04.05 Local Area Network Systems*

CAT6 ethernet switches and patch panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1984	15	APR-12

D5030.05 Public Address and Music Systems**

Two-zone public address system via telephone input. One TOA amplifier per PA zone.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: **Replace Public Address and Music Systems [9042 m2]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$24,000	Unassigned

Updated: APR-12

D5030.06 Television Systems*

Coaxial cables run to each room for patient TV. Local splitters and signal amplifiers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

D5090.01 Uninterruptible Power Supply Systems**

Eaton 30 kVA UPS, Model 9335.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2011	30	APR-12

<u>Capacity Size</u>	<u>Capacity Unit</u>
30	kVA

Event: **Replace 35 kVA UPS (1)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2041	\$25,000	Unassigned

Updated: APR-12

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

Emergency standby power generation system comprised of two 175kW Brown Bouert (now Onan) generators. Generators are regularly maintained and each have approximately 350 hours of run time.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	175	kW	

Event: Replace Two (2) Packaged Engine Generator Systems (Emergency Power System)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$370,000	Unassigned

Updated: APR-12

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1010.05.01 Barber and Beauty Shop Equipment*

Salon with counter, wash sink and styling equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	0	APR-12

E1010.06 Commercial Laundry and Dry Cleaning Equipment*

Commercial grade washers and dryers.
 Dryers: Windsor(1), Electrolux(2), Unimac(1)
 Washers; Braun(1) Electrolux(1), Milnor(1)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

E1020.07 Laboratory Equipment*

Assorted lab equipment Rooms 1040 and 1041.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

E1020.08 Medical Equipment*

Assorted medical equipment throughout the hospital areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

E1030.03 Loading Dock Equipment*

Dock Leveler: exterior located, sunken into pit, flush with concrete pad, 2 x 3.5 meters, side rails, electric operation, with side bollards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

Event: Add 250 m2 Receiving Dock Enclosure

Concern:

Shipping and receiving from the exterior.
 Small receiving room.
 No storage space.

Recommendation:

Add 200 m2 of shipping receiving space with:
 -shipping receiving area.
 -garbage enclosure (partitioned off from shipping receiving)
 -overhead doors.
 -internal dock leveler.
 -seals around door opening.
 -level loading area
 -sunken truck ramp area.
 -electrical and mechanical services.

Consequences of Deferral:

Higher operational efficiency costs.
 Deferred safety.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2013	\$400,000	High

Updated: APR-12

Event: Hydro Loading Dock Replacement

Concern:

The old dock is 25 yrs plus and has many issues. The lift arms are bending and the deck has some bad rust on it as it is starting to weaken the deck.

Recommendation:

Replace old hydro loading dock with new one.

Consequences of Deferral:

Higher maintenance costs.
 Higher operational costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$15,000	Medium

Updated: APR-12

E1090.02 Solid Waste Handling Equipment

BFI container on site, exterior location 20 meters from loading dock.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

E1090.03 Food Service Equipment*

Food Service Equipment: Includes on site food storage, food preparation, cooking equipment, servery lineup, and cleaning equipment

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	25	APR-12

E1090.04 Residential Equipment*

Residential quality stoves and microwaves in kitchens.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	10	APR-12

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Therapy equipment include: benches, beds, stairs, parallel bars, walkers, and assorted support equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	15	APR-12

E2010.02 Fixed Casework - 1984**

Casework: Wood veneer core with plastic laminate exterior.

Vanities: plywood core with plastic laminate finish.

Wood veneer with painted finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	35	APR-12

Event: Replace 270 m Fixed Casework - 1984

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2019	\$234,900	Unassigned

Updated: APR-12

E2010.02 Fixed Casework - 2000**

Casework construction with melamine interior core and plastic laminate exteriors, with solid wood trim.

Wood veneer construction with stain and clear top coat.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	35	APR-12

Event: Replace 100 m Fixed Casework - 2000

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$87,000	Unassigned

Updated: APR-12

E2010.03.01 Blinds - 1984**

Vertical blinds, vinyl composition, off-white colour, with valance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	30	APR-12

Event: Replace 650 m2 Blinds - 1984

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$76,100	Unassigned

Updated: APR-12

E2010.03.01 Blinds - 2000**

Roller Blinds: Roll up assembly, with polyester fabric, 3-5% openness, grey colour, to newer renovated areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	30	APR-12

Event: Replace 150 m2 Blinds - 2000

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$17,600	Unassigned

Updated: APR-12

F1040.05 Liquid and Gas Storage Tanks*

Oxygen: Stored in enclosed area on site.
 Diesel Fuel: Stored in enclosed area on site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	20	APR-12

S8 SPECIAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Level concrete or asphalt surfaces from parking areas to facility entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4010.02 Barrier Free Entrances*

Automatic sliding entrances provided at main/emergency entrance, front continuing care lobby, north staff entrance, and form continuing care to enclosed patio.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4010.03 Barrier Free Interior Circulation*

Circulation is barrier free and the floors are services with 3 elevators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4010.04 Barrier Free Washrooms*

Public washrooms are barrier free.
Staff washrooms within change rooms are not barrier free.
Patient washrooms are not all barrier-free.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4030.01 Asbestos*

No reports of asbestos.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4030.02 PCBs*

No reports of PCBs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4030.04 Mould*

No reports of mould.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4030.06 Radioactive Compounds*

No reports of radioactive compounds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4030.07 Ozone Depleting Substances (CFC's, HCFC's, Halon)*

No ozone depleting substances reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K4030.08 Biohazardous Materials*

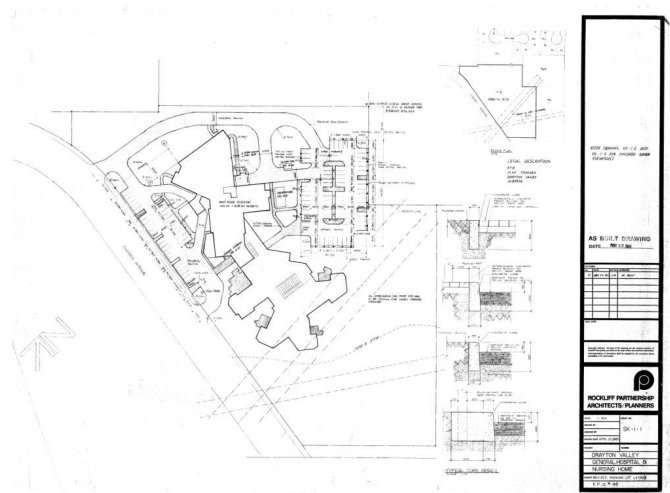
Biohazard waste material is contained on site and disposed of off site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12

K5010.01 Site Documentation*

Facility Evaluation by PBK Architects Inc.
 Evaluation conducted on October 19, 2011.
 Areas evaluated include building perimeter and parking lot areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12



Site Plan

K5010.02 Building Documentation*

Facility Evaluation by PBK Architects/GENIVAR.

Evaluation Date 10/05/2011.

Areas evaluated include the basement, main floor, second floor, and roof areas.

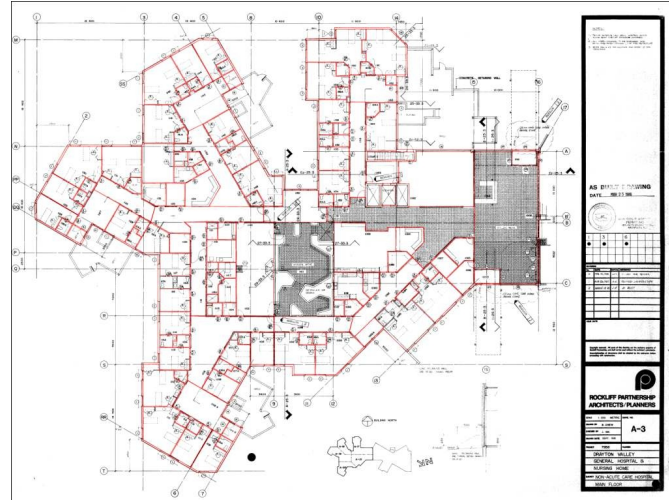
Drawings: Could not load drawing jpegs.

General Summary: This facility is an acute care and long-term care facility offering continuing care and 24-hour emergency services.

Original Construction: 1984, 9000 m2, single and two storey.

Chapel Addition: 1988, 174 m2, single storey

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1984	0	APR-12



Main Floor