RECAPP Facility Evaluation Report

David Thompson Regional Health Authority

Rocky Mountain House Health Centre

B1152A

Rocky Mountain House

Report run on: March 29, 2010 9:56 AM

Facility Details

Building Name: Rocky Mountain House Heal
Address: 5016 - 52 Avenue
Location: Rocky Mountain House

Building Id: B1152A
Gross Area (sq. m): 5,668.00
Replacement Cost: $36,692,723
Construction Year: 1971

Evaluation Details

Evaluation Company: Sherri Turpin - Architect
Evaluation Date: August 19 2009
Evaluator Name: Len M. O'Connor

Total Maintenance Events Next 5 years: **$4,880,503**
5 year Facility Condition Index (FCI): **13.30%**

General Summary:

The Rocky Mountain House Health Unit has 26 funded beds and 33 flat surfaces in acute care. There are no continuing care beds.

1971 Original Building: Single storey, combustible and non-combustible, sprinklered, of 2160 m2 in area, with spaces for patient rooms and support rooms, kitchen, laundry, maintenance, work shop.

1979 Addition and Renovation: Single storey with basement sprinklered with 2430 m2 of main floor and 760 m2 of basement area. The main floor area has the main entrance, mental and public health services, physiotherapy, x-ray, lab, renal and community care. The basement has areas for storage, medical records, staff areas, meeting, equipment, and maintenance.

1997 Emergency Addition and Renovation : This area of 245 m2, single storey, and sprinklered added on a new ambulance bay with treatment areas, trauma rooms, doctor's areas, admitting and waiting areas for a south extension to the existing facility. Adjacent rooms were renovated in the existing facility.

2002 Kitchen Upgrade: The kitchen was upgraded with new finishes and equipment. No area was added.

2004 Renovation: Upgraded the main entrance, east wing and basement areas with no area added.

2009 Portable Building: The 200 m2 portable building was added in 2009. The area of the link building is 20 m2. This building houses the health records and is located between the 1971 and 1979 north wings and is attached to the north side of the facility via a link.

Total Area is approximately is 5815 m2.

This facility is in good condition.

MAILING ADDRESS: BAG 4000, ROCKY MOUNTAIN HOUSE, ALTA. T0M1T0 MRS. JEAN GRAHAM - BOARD CHAIRMAN MR. NEIL FOREMAN - ADMINISTRATOR MRS. BETTY MILLER - ASSISTANT ADMINISTRATOR 845-3347 424-7818 845-7030 - FAX

Structural Summary:

Structural Summary: The foundations are composed of concrete strip footing or pad footings with concrete grade beams. A portion of the 1979 building has a full basement. There are slabs on grade, a concrete floor structural frame, and structural slabs. Structural interior walls supporting floors include concrete, concrete masonry units, wood framed assemblies and steel frame assemblies. There are exterior concrete ramps. The structural interior walls supporting roofs are wood or masonry and roof decking are either metal of wood sheathing. The canopies are both wood or metal framing.

Events: A study and repair are required for floor fire-stopping.

Rating: The structural rating is good.

Envelope Summary:

Envelope Summary: Envelope elements include brick masonry, painted concrete block, metal siding, and joint sealant. The metal components are painted. The exterior wall construction is concrete, masonry, wood with plywood sheathing, and metal with gypsum sheathing. Vapour retarders are both interior and exterior. Insulation is both exterior rigid and internal batts. The air barriers are exterior building paper or self adhered membranes. The parapets are wood or metal framed and there are prefinished metal louvers and grilles. The soffits are either prefinished or painted metal. The exterior openings are enclosed with metal or aluminum frames with insulated glass, insulated

metal doors or aluminum door assemblies. There are also insulated overhead sectional doors. The roof assemblies consist of vapour retarders, rigid insulation, built-up roofing, SBS roofing and metal roofing. Other exterior envelope elements include metal gutters, metal downspouts, and a roof hatch.

Events: The envelope events include repairs to joint sealant, firestopping study with repair, regrading, brick veneer with door repair.

Rating: The envelope rating is good.

Interior Summary:

Interior Summary: Elements include wood-metal-masonry partitions, metal and aluminum windows, aluminum storefronts assemblies, metal fire doors, roll shutter doors, fabricated compartments, corner guards, and hand rails. Other elements include interior identifying devices, storage shelving, plus bath and toilet accessories. The stairs are concrete with resilient flooring. The wall finishes include wood, tile, and paint. The floors are finished with paint, tile, resilient sheet and tile flooring, and carpeting. The ceiling finishes are raw concrete, painted gypsum board, or acoustic T-bar. There is an elevator. Equipment is used for food service, laundry, residential uses, and therapy. Other elements include casework and blinds. There is one portable building. There are no reports of hazardous materials. Barrier-free accessibility is generally good except in the 1971 build patient rooms.

Events: The interior partition firestopping requires a study and repair. The concrete floors require repainting. The 1971 patient room washrooms require a code upgrade to current barrier-free standards.

Rating: The interior rating is good for the 1979 and 1997 buildings. The 1971 building is a fair rating.

Mechanical Summary:

Ventilation is provided by variety of air handling units located in Mechanical Rooms and on the roof. Total of 6 air handling units.
Air distribution system is via medium velocity single ductwork to grilles and diffusers.
Roof top package air handling units serve 1971 and 1997 sections. Two indoor mounted air handling units ventilate 1979 section.
Air conditioning is provided by indoor reciprocating water chiller and condensers. Several split AC units are located throughout facility.
Heating system includes two boiler plants which serve 1971, 1979 and 1997 sections.
Hot water distribution to perimeter radiation, radiant panels, unit heaters and heat exchangers. Hot water is circulated via base mounted pumps.
Steam grid humidification system provided for all areas.
Domestic hot water is generated by hot water tanks fed from the main boilers, which provide water to Laundry, Kitchen and washrooms. System is fed from 1971 and 1979 boiler plants. Copper piping distribution to plumbing fixtures complete with domestic hot water recirculation systems.
Pneumatic controls.
Medical gas systems include the piping, fittings, valves, air compressor and vacuum pumps. Medical oxygen, medical air, nitrous oxide and vacuum system.
Fire protection system for the facility consists of standpipe system (1971 &1979), sprinkler system (1997), hand held fire extinguishers and chemical suppression system for kitchen exhaust canopy.
Sanitary service to Town's mains.
Storm service to surface run off.
Domestic water supplied from the municipal systems.
Municipal natural gas service to gas fired appliances.

Overall mechanical system is in acceptable condition.

Electrical Summary:

Built in 1971 this facility was added to in 1979 and upgraded in2005.
All electrical systems are in acceptable condition with the interior lighting being
replaced with energy efficient T-8 lamps and electronic ballasts as the older T-12 lamps and magnetic ballasts deteriorate and burn out. The Main padmount transformer feeds the original ITE 1600Amp MDP.
The branch circuit panels are a mixture of ITE,Westinghouse and Cutler-Hammer.
The MCC,S are also a mixture of Klockner Moeller and Westinghouse.
The fire alarm system was installed in 2007 and is a Simplex4100U panel.
The telephone system utilizes a Nortel Wireless system with a MG 1000 Router.
The Security system uses Panasonic Video cameras which feed a Dell Monitor in the Security Office.

The PA system is through the Interm PA 935Amplifier.
The Emergency Generator is a 3306Cat c/w a 281KVA Generator attached.
This facility is 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

A1010 Standard Foundations* 1971

Reinforced concrete strip footings supporting concrete grade beams.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

A1010 Standard Foundations* 1979

Reinforced concrete strip footings supporting concrete grade beams and basement walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

A1010 Standard Foundations* 1997

Reinforced concrete strip footings and pad footings supporting concrete grade beams or piers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

A1030 Slab on Grade* 1971

Reinforced concrete slab-on-grade, on cpmpacted engineered fill, on compacted soil.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

A1030 Slab on Grade* 1979

125 mm concrete slab-on-grade, #4 bars @ 300 o.c., vapour retarder, 150 mm compacted engineered fill, on compacted sub-base.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

A1030 Slab on Grade* 1997

125 mm concrete slab-on-grade, 10 M bars @ 400 o.c., vapour retarder, 200 mm compacted engineered fill, on compacted sub-base.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

A2020 Basement Walls (& Crawl Space)* - 1979

Reinforced concrete basement walls and grade beams with varied thicknesses 200-300 mm and elevations.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B1010.01 Floor Structural Frame (Building Frame)* 1979

Reinforced concrete columns and concrete walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* - 1971

Concrete masonry units with reinforcement.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* - 1979

Concrete masonry units with reinforcement.
Structural steel beams, columns, and OWSJs.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* - 1997

Concrete masonry units with reinforcement. Structural steel beams, columns, and OWSJs.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

B1010.03 Floor Decks, Slabs, and Toppings* - 1979

Structural concrete slab over basement area, reinforcement varies, thickness 178 mm to 278 mm.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B1010.06 Ramps: Exterior* - 1979

Reinforced concrete ramp to basement loading area with reinforced concrete retaining walls.
Main entrance barrier-free access ramp is concrete with metal handrails.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

B1010.07 Exterior Stairs* - 1979

Cast-in-place concrete stairs with reinforcement and retaining wall, unfinished, with painted metal hand railing.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

B1010.09 Floor Construction Fireproofing* - 1979

No floor fireproofing viewed to the underside of the structural slab over the basement area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

B1010.10 Floor Construction Firestopping*

No firestopping observed for 1979 basement floor penetrations.

Rating	Installed	Design Life	Updated
3 - Marginal	2009	50	MAR-10

Event: Repair Firestopping

Concern:
No firestopping observed.
Recommendation:
Install firestopping as recommended in study.
Consequences of Deferral:
Potential exposure to unsafe fire conditions.

Type	Year	Cost	Priority
Code Repair	2011	$5,000	Medium

Updated: MAR-10

B1020.01 Roof Structural Frame* 1971

Wood truss joists and wood or steel beams, dimensional blocking, supported on load bearing masonry walls or steel columns.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

B1020.01 Roof Structural Frame* 1979

Steel construction with OWSJ and W-beams, supported on steel HSS columns or load bearing masonry walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B1020.01 Roof Structural Frame* 1997

Steel construction with OWSJ and W-beams, supported on steel HSS columns or load bearing masonry walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

B1020.02 Structural Interior Walls Supporting Roofs* - 1971

Load bearing masonry walls, 200 mm, with reinforcing and masonry lintels.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-10

B1020.02 Structural Interior Walls Supporting Roofs* - 1979

Load bearing masonry walls, 200 mm, with reinforcing and masonry lintels.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	0	MAR-10

B1020.02 Structural Interior Walls Supporting Roofs* - 1997

Load bearing masonry walls, 200 mm, with reinforcing and masonry lintels.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	0	MAR-10

B1020.03 Roof Decks, Slabs, and Sheathing* - 1971

Wood decking, 19 mm, on wood truss joists.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-10

B1020.03 Roof Decks, Slabs, and Sheathing* - 1979

Metal Decking, 38 mm, with deck closure channels and angles.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	0	MAR-10

B1020.03 Roof Decks, Slabs, and Sheathing* 1997

Metal Decking, 38 mm, with deck closure channels and angles.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	0	MAR-10

B1020.04 Canopies* - 1979

Type-1: Painted metal columns and beams with painted corrugated metal decking, north side of building, main level, above load dock ramp.
Type-2: Treated wood posts and beams with prefinished corrugated metal decking roof and prefinshed metal soffit, located south adjacent to the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

B1020.06 Roof Construction Fireproofing* - 1971

Gypsum board to underside of roof joints. No spray-on fireproofing observed. No firestopping at penetrations.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

B1020.06 Roof Construction Fireproofing* - 1979

Metal Strapping with 2 layers of gypsum board. No spray-on fireproofing observed.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

B1020.06 Roof Construction Fireproofing* 1997

Exposed metal decking. No spray-on fireproofing observed.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	MAR-10

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin* 1971

Standard brick veneer, running bond, full height, medium brown two tone colour, soldier courses banding below window line.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	75	MAR-10

Event: Regrade Soft Landscape Surfaces

Concern:

Brick veneer to the north face of the facility has lower wall staining to many location due to water and snow build-up adjacent to the building.

Recommendation:

Lower grade to 150-200 mm below the brick line, regrade surfaces to provide 2% slope away from face of building for 3 meters, construct swale to capture moisture, grade swale to catch basin or to adjacent street, and re-landscape affected surfaces. There is a potential problem to the south face of the east 1971 wing where the parking lot is higher than the main floor elevation.

Consequences of Deferral:

Deterioration of exterior wall assemblies.

Type	Year	Cost	Priority
Preventative Maintenance	2011	$30,000	Medium

Updated: MAR-10

Event: Repair Brick Veneer and Back-up Wall

Concern:

Brick veneer at west staff entrance is damaged at grade due to frost heaving. The back-up wall is cracked and the entry door and frame are rusted.

Recommendation:

Lower grade at entrance, repour concrete pad, dowel pad to foundation, provide repairs to masonry back-up wall and brick veneer, replace door and frame. There are two single doors at this exterior wall corner. We would recommend deleting one of the doors and infilling the masonry back-up wall and brick veneer. This would provide a stronger corner wall assembly

Consequences of Deferral:

Increased damage tot he brick veneer, backup wall and the door-frame assembly.

Type	Year	Cost	Priority
Repair	2011	$16,000	Medium

Updated: MAR-10

B2010.01.02.01 Brick Masonry: Ext. Wall Skin* 1979

Standard brick veneer, running bond, full height, medium brown two tone colour, soldier courses banding below window line.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	75	MAR-10

B2010.01.02.01 Brick Masonry: Ext. Wall Skin* 1997

Standard brick veneer, running bond, height varies, medium brown two tone colour.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	75	MAR-10

B2010.01.02.02 Concrete Block: Ext. Wall Skin* 1971

Smooth face block, single score, 200 mm thickness, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	75	MAR-10

B2010.01.06.03 Metal Siding** 1971

Prefinished metal siding, raised profile, horizontal application, colour off white, for 1200 mm fascia banding above window line.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: **Replace 150 m2 Metal Siding**

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$24,000	Unassigned

Updated: MAR-10

B2010.01.06.03 Metal Siding** 1979

Prefinished metal siding, smooth face profile, vertical application, colour off white, for 1200 mm fascia banding above window line.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: **Replace 370 m2 Metal Siding**

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$60,000	Unassigned

Updated: MAR-10

B2010.01.06.03 Metal Siding** 1997

Prefinished metal siding, raised profile, horizontal application, colour off white, for full ar partial wall applications.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

Event: Replace 205 m2 Metal Siding

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$33,000	Unassigned

Updated: MAR-10

B2010.01.09 Expansion Control: Exterior Wall Skin* 1971

Expansion control joints with sealant fill over rod backing.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	75	MAR-10

B2010.01.09 Expansion Control: Exterior Wall Skin* 1979

Expansion control joints with sealant fill over rod backing.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	75	MAR-10

B2010.01.09 Expansion Control: Exterior Wall Skin* 1997

Expansion control joints with sealant fill over rod backing.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	75	MAR-10

B2010.01.11 Joint Sealers (caulking): Ext. Wall** 1971

Sealant at perimeter of wall openings, dark brown colour with rod backing.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	20	MAR-10

Event: Replace 270 m Joint Sealers (caulking): Ext Wall

Concern:
Sealant is hard and cracked.
Recommendation:
Remove old sealant, repair or replace backing, and install new sealant.
Consequences of Deferral:
Infiltration of moisture and the deterioration of the back-up wall assembly.

Type	Year	Cost	Priority
Failure Replacement	2011	$12,000	Low

Updated: MAR-10

B2010.01.11 Joint Sealers (caulking): Ext. Wall** 1979

Sealant at perimeter of wall openings, dark brown colour with rod backing.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	20	MAR-10

Event: Replace 350 m Joint Sealers (caulking): Ext. Wall

Concern:
Sealant is hard and cracked.
Recommendation:
Remove old sealant, repair or replace backing, and install new sealant.
Consequences of Deferral:
Infiltration of moisture and the deterioration of the back-up wall assembly.

Type	Year	Cost	Priority
Failure Replacement	2011	$13,000	Low

Updated: MAR-10

B2010.01.11 Joint Sealers (caulking): Ext. Wall** 1997

Sealant at perimeter of wall openings, dark brown colour with rod backing.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	MAR-10

Event: Replace 61 m Joint Sealers (caulking): Ext. Wall

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$2,300	Unassigned

Updated: MAR-10

B2010.01.13 Paints (& Stains): Exterior Wall** 1997

Painted metal door and frames, lintels, and bollards, masonry walls for 1971 building and concrete walls and grade beams for the 1979 building. Repainting occurs as required or on a 10 year cycle.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	MAR-10

Event: Replace 150 m2 Paints (& Stains): Exterior Wall

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$3,800	Unassigned

Updated: MAR-10

B2010.02.01 Cast-in-place Concrete:Ext.Wall Const* - 1979

Cast-In-Place concrete walls, basement foundations and grade beams, with painted finish

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

B2010.02.03 Masonry Units: Ext. Wall Const.* - 1971

Load bearing masonry units, 200 mm thickness, standard modular units, smooth faced with and without single score, exposed or with strapping and gypsum plaster, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

B2010.02.03 Masonry Units: Ext. Wall Const.* - 1979

Load bearing masonry units, 200 mm thickness, standard modular units, smooth faced.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B2010.02.03 Masonry Units: Ext. Wall Const.* - 1997

Load bearing masonry units, 200 mm thickness, standard modular units, smooth faced.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

B2010.02.04 Load-Bearing-Metal Studs: Ext. Wall* - 1979

Load-bearing metal studs, 152 mm, 13 exterior grade plywood, and 13 mm interior gypsum board.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B2010.02.04 Load-Bearing-Metal Studs: Ext. Wall* - 1997

Load-bearing metal studs, 152 mm, 13 exterior grade gypsum sheathing, and 13 mm interior gypsum board.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

B2010.02.05 Wood Framing : Ext. Wall Const.* - 1971

Wood framed wall, 38 x 89 mm, exterior grade plywood sheathing, interior gypsum board.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation* 1971

Wood Framed Wall: Exterior building paper, R-20 or R-12 batt insulation in studs cavities, and interior vapour retarder.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation* 1979

Metal Stud Walls: Exterior building paper, R-20 batt insulation in studs, and interior vapour retarder.
Masonry Walls: R15 rigid insulation and surface applied air barrier membrane.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation* 1997

Masonry Wall: 50 rigid insulation and surface applied air barrier membrane.
Metal Stud Walls: 50 rigid insulation and surface applied air barrier membrane.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	100	MAR-10

B2010.05 Parapets* 1971

Wood Framed Parapet: 13 mm exterior grade wood sheathing, 89 or 140 mm wood framing, exterior building paper or roofing vapour retarded, R-20 or R-12 batt insulation in studs cavities.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

B2010.05 Parapets* 1979

Wood or Metal Framed Parapet: 13 mm exterior grade wood sheathing, 89 or 140 mm wood or metal framing, exterior building paper or roofing vapour retarded, R-20 or R-12 batt insulation in studs cavities or rigid insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

B2010.05 Parapets* 1997

Wood Framed Parapet: 13 mm exterior grade wood sheathing, 89 mm wood framing, exterior building paper or roofing vapour retarded, R-12 batt insulation in studs cavities, 50 mm rigid insulation exterior insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	MAR-10

B2010.06 Exterior Louvers, Grilles, and Screens*

Prefinished and painted galvanized louvers and grilles.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

B2010.09 Exterior Soffits* - 1979

Type-1: Prefinished metal soffits, vented, brown colour, smooth face.
Type-2: Prefinished metal soffits, non-vented, off-white colour, corrugated face profile.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

B2020.01.01.01 Steel Windows (Glass & Frame)**

Welded steel frame, painted, with insulated glass panels.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace 12 m2 Steel Windows (Glass & Frame)**

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$16,000	Unassigned

Updated: MAR-10

B2020.01.01.02 Aluminum Windows (Glass & Frame)** 1971

Aluminum frame, dark brown colour, with insulated glass units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace 95 m2 Aluminum Windows (Glass & Frame)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$85,003	Unassigned

Updated: MAR-10

B2020.01.01.02 Aluminum Windows (Glass & Frame)** 1979

Aluminum frame, dark brown colour, with insulated glass units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: Replace 120 m2 Aluminum Windows (Glass & Frame)

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$176,000	Unassigned

Updated: MAR-10

B2020.01.01.02 Aluminum Windows (Glass & Frame)** 1997

Aluminum frame, dark brown colour, with insulated glass units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

Event: Replace 11 m2 Aluminum Windows (Glass & Frame)

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$16,000	Unassigned

Updated: MAR-10

B2020.02 Storefronts: Windows - 1979 Section**

Aluminum storefront assemblies, dark anodized, with sealed glass units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: Replace 32 m2 Storefronts: Windows

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$50,000	Unassigned

Updated: MAR-10

B2030.01.01 Aluminum-Framed Storefronts: Doors** - 1979

Aluminum framed, dark anodized, with sealed glass units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 10ea Aluminum-Framed Storefronts: Doors**

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$42,000	Unassigned

Updated: MAR-10

B2030.01.01 Aluminum-Framed Storefronts: Doors** 1997

Aluminum framed, dark anodized, with sealed glass units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

Event: Replace 2 ea Aluminum-Framed Storefronts: Doors

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$8,400	Unassigned

Updated: MAR-10

B2030.01.06 Automatic Entrance Doors** - 1979

Automatic entrance assemblies, slided to one side, fixed panel, aluminum frame, dark anodized finish, clear tempered glass

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 2 ea Automatic Entrance Doors

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$52,000	Unassigned

Updated: MAR-10

B2030.02 Exterior Utility Doors** - 1971

Metal door and frame, insulated, painted, with and with glass panel.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace 6 ea Exterior Utility Doors

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$8,400	Unassigned

Updated: MAR-10

B2030.02 Exterior Utility Doors** - 1979

Metal door and frame, insulated, painted, with and with glass panel.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: Replace 3 ea Exterior Utility Doors

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$4,200	Unassigned

Updated: MAR-10

B2030.02 Exterior Utility Doors** - 1997

Metal door and frame, insulated, painted, with and with glass panel.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

Event: Replace 2 ea Exterior Utility Doors

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$2,800	Unassigned

Updated: MAR-10

B2030.03 Large Exterior Special Doors (Overhead)* - 1979

Insulated metal sectional overhead door, manual operation, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

B2030.03 Large Exterior Special Doors (Overhead)* - 1997

Section prefinished metal door, white colour, vision lites, motorized operation; radio, ground sensor or push button operation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

B3010.01 Deck Vapor Retarder and Insulation* - 1971

Deck vapour retarder and rigid board insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	25	MAR-10

B3010.01 Deck Vapor Retarder and Insulation* - 1979

Deck vapour retarder and rigid board insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	25	MAR-10

B3010.01 Deck Vapor Retarder and Insulation* - 1997

Deck vapour retarder and rigid board insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	MAR-10

B3010.02.01.01 Asphalt Shingles**

Asphalt shingles, 3-tab, light grey colour, with underlayment paper. Located on the link access to the portable building.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	25	MAR-10

Event: Replace 20 m2 Asphalt Shingles

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$1,200	Unassigned

Updated: MAR-10

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)** - 1971

Built-up roofing with gravel ballast with galvanized flashings or prefinished cap flashings at the roof perimeter.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	25	MAR-10

Event: Replace 2160 m2 Built-up Bituminous Roofing (Asphalt & Gravel)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$378,000	Unassigned

Updated: MAR-10

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)** 1979

Built-up roofing with gravel ballast with galvanized flashings or prefinished cap flashings at the roof perimeter.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	25	MAR-10

Event: Replace 148 m2 Built-up Bituminous Roofing (Asphalt & Gravel)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$26,000	Unassigned

Updated: MAR-10

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)** 1997

SBS 2-ply roofing with galvanized flashings or prefinished cap flashings at the roof perimeter.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	MAR-10

Event: Replace 245 m2 Built-up Bituminous Roofing (Asphalt & Gravel)

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$43,000	Unassigned

Updated: MAR-10

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** 1979

SBS 2-ply roofing with galvanized flashings or prefinished cap flashings at the roof perimeter.

Rating	Installed	Design Life	Updated
5 - Good	2006	25	MAR-10

Event: Replace 2180 m2 Modified Bituminous Membrane Roofing (SBS)

Type	Year	Cost	Priority
Lifecycle Replacement	2031	$492,500	Unassigned

Updated: MAR-10

B3010.07 Sheet Metal Roofing**

Standing seam and lapped corrugated, prefinished metal, brown colour, over unheated shade canopies.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: Replace 80 m2 Sheet Metal Roofing

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$23,500	Unassigned

Updated: MAR-10

B3010.08.02 Metal Gutters and Downspouts**

Prefinished metal gutters and rain water leaders, white and brown colours, residential grade.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 100 m Metal Gutters and Downspouts

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$2,500	Unassigned

Updated: MAR-10

B3020.02 Other Roofing Openings (Hatch,Vent, etc)*

Roof Hatch: Access from ships latter stairs, 800x2100 mm, galvanized metal, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	25	MAR-10

S3 INTERIOR

C1010.01 Interior Fixed Partitions* 1971

Masonry partitions, 200 mm width, with and without strapping and gypsum board, painted and non-painted.
Wood framed walls with gypsum board, insulated and non-insulated, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-10

C1010.01 Interior Fixed Partitions* 1979

Masonry partitions, 200 mm width, with and without strapping and gypsum board, painted and non-painted.
Metal framed walls with gypsum board, insulated and non-insulated acoustic batt , painted.
Walls changed in 2004 renovation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	0	MAR-10

C1010.01 Interior Fixed Partitions* 1997

Masonry partitions, 200 mm width, with and without strapping and gypsum board, painted and non-painted.
Metal framed walls with gypsum board, insulated and non-insulated acoustic batt, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	0	MAR-10

C1010.05 Interior Windows* 1971

Welded metal frame, rated and non-rated, with clear tempered glass or wire glass, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	80	MAR-10

C1010.05 Interior Windows* 1979

Welded metal frame, rated and non-rated, with clear tempered glass or wire glass, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	80	MAR-10

C1010.05 Interior Windows* 1997

Welded metal frame, rated and non-rated, with clear tempered glass or wire glass, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	80	MAR-10

C1010.06 Interior Glazed Partitions and Storefronts*

Aluminum anodized partitions with clear tempered glass.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	80	MAR-10

C1010.07 Interior Partition Firestopping*

No firestopping observed in any building.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	50	MAR-10

Event: Repair Firestopping

Concern:
Firestopping was not observed. Refer to K4020 Building Code for associated study.
Recommendation:
Install firestopping recommended in the study.
Consequences of Deferral:
Unknown fire safety conditions.

Type	Year	Cost	Priority
Code Repair	2011	$10,000	Medium

Updated: MAR-10

C1020.01 Interior Swinging Doors (& Hardware)* 1971

Metal door and frames, with and without glass lites, rated and non-rated, painted.
Wood doors with clear finish in painted metal frames, with and without glass lites, rated and non-rated, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

C1020.01 Interior Swinging Doors (& Hardware)* 1979

1979 Building: Metal door and frames, with and without glass lites, rated and non-rated, painted. Wood doors with clear finish in painted metal frames, with and without glass lites, rated and non-rated, painted.
2004 Renovation: Doors, frames and hardware upgraded in 2004 renovation.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	40	MAR-10

C1020.01 Interior Swinging Doors (& Hardware)* 1997

Metal door and frames, with and without glass lites, rated and non-rated, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

C1020.03 Interior Fire Doors* 1971

Metal doors and frames, rating varies, with and with wire glass lites, hardware to suit conditions, painted finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

C1020.03 Interior Fire Doors* 1979

Metal doors and frames, rating varies, with and with wire glass lites, hardware to suit conditions, painted finish.
Some doors were upgraded in 2004 renovation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

C1020.03 Interior Fire Doors* 1997

Metal doors and frames, rating varies, with and with wire glass lites, hardware to suit conditions, painted finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	MAR-10

C1020.05 Interior Large Doors*

Overhead roll shutter door, aluminum, coiling overhead, side tracking, lockable to administration and community care areas.
Side folding closure, pencil rod style, side folding operation, overhead track, clear anodized finish, in cafeteria.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	40	MAR-10

C1030.01 Visual Display Boards**

White boards and tack boards with perimeter aluminum frame, wall mounted. Ages of boards vary.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	20	MAR-10

Event: Replace 10 ea Visual Display Boards

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$8,600	Unassigned

Updated: MAR-10

Event: Replace 25 m2 Visual Display Boards

Type	Year	Cost	Priority
Lifecycle Replacement	2024	$8,600	Unassigned

Updated: MAR-10

C1030.02 Fabricated Compartments(Toilets/Showers)** 1979

Prefinished metal toilet and shower partitions with operable doors and hardware.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 7 Fabricated Compartments (Toilets/Showers)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$11,800	Unassigned

Updated: MAR-10

C1030.02 Fabricated Compartments(Toilets/Showers)** 2004

Prefinished metal toilet and shower partitions with operable doors and hardware.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-10

Event: Replace 8 Fabricated Compartments(Toilets/Showers)

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$13,400	Unassigned

Updated: MAR-10

C1030.05 Wall and Corner Guards* 1971

Preformed corner guards colour green.
Stainless steel 76x76 mm up up 1200 mm above floor

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	MAR-10

C1030.05 Wall and Corner Guards* 1979

Acrovyn wall railing.
Plastic laminate wall railings with top and bottom wood trims.
Laminated wood railing.

Rating	Installed	Design Life	Updated
5 - Good	2004	15	MAR-10

C1030.05 Wall and Corner Guards* 1997

Preformed corner guards and hand railing, colour green.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	MAR-10

C1030.06 Handrails* 1971

Preformed hand railing, wall mounted, colour brown.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

C1030.06 Handrails* 1997

Premoulded plastic hand/bumper railings with returns to wall, coloured green.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

C1030.08 Interior Identifying Devices*

For buildings 1971, 1979, and 1997:
Room signs, laminated plastic, door mounted.
Directional Signs, laminated plastic, white colour with black lettering.
Office Signs, white background with blue or grey lettering rounded corners with border, DTHR logo.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	20	MAR-10

C1030.10 Lockers** 1979

Metal lockers, prefinished, lockable, slopping top, single shelf, 300 x 400 x 1800 mm dimensions for staff and doctors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 100 Lockers

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$75,300	Unassigned

Updated: MAR-10

C1030.12 Storage Shelving* 1971

Storage shelving included, wood with clear or painted finishes, prefinished metal, and stainless steel.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

C1030.12 Storage Shelving* 1979

Storage shelving includes prefinished metal, prefineshed wood, or stainless steel.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-10

C1030.14 Toilet, Bath, and Laundry Accessories* 1971

Accessories include; toilet tissue, hand sanitizer, and soap dispensers; grab bars, and mirrors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	20	MAR-10

C1030.14 Toilet, Bath, and Laundry Accessories* 1979

Accessories include; toilet tissue, hand sanitizer, and soap dispensers; grab bars, and mirrors. Upgrades made during the 2004 renovation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	20	MAR-10

C1030.14 Toilet, Bath, and Laundry Accessories* 1997

Accessories include; toilet tissue, hand sanitizer, and soap dispensers; grab bars, and mirrors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	MAR-10

C2010 Stair Construction*

1971 Building: Wood stairs.
1979 Building: Cast-in-place concrete stairs.
All Building: Stairs on roof, galvanized metal, painted and non-painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

C2020.05 Resilient Stair Finishes**

Integral rubber stair nosing tread, and riser.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	20	MAR-10

Event: Replace 10 m2 Resilient Stair Finishes

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$1,100	Unassigned

Updated: MAR-10

C2020.08 Stair Railings and Balustrades*

Metal stair hand railings with painted finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

C2020.11 Other Stair Finishes*

Painted finish to wood stair or stringers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	0	MAR-10

C3010.01 Concrete Wall Finishes (Unpainted)*

Basement concrete walls, painted and unpainted, to various locations in storage and maintenance areas of 1979 building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	100	MAR-10

C3010.02 Wall Paneling**

Cedar wall paneling in staff dining room, diagonal pattern, clear finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace 30 m2 Wall Paneling

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$3,200	Unassigned

Updated: MAR-10

C3010.06 Tile Wall Finishes** 1971

Ceramic wall tiles, 102x102 mm, colour white.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace 20 m2 Tile Wall Finishes

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$6,700	Unassigned

Updated: MAR-10

C3010.06 Tile Wall Finishes** 1979

Ceramic wall tiles, 102x102 mm, colour white.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	40	MAR-10

Event: Replace 25 Tile Wall Finishes

Type	Year	Cost	Priority
Lifecycle Replacement	2044	$8,400	Unassigned

Updated: MAR-10

C3010.11 Interior Wall Painting* 1971

Painting to gypsum board, concrete block or concrete, colours vary, medium to high gloss. Areas are repainted on a 10 year cycle.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	10	MAR-10

C3010.11 Interior Wall Painting* 1979

Painting to gypsum board, concrete block or concrete, colours vary, medium to high gloss. Areas are repainted on a 10 year cycle.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	10	MAR-10

C3010.11 Interior Wall Painting* 1997

Painting to gypsum board, concrete block or concrete, colours vary, medium to high gloss. Areas are repainted on a 10 year cycle.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	10	MAR-10

C3010.14 Other Wall Finishes*

Brick veneer, match to exterior veneer, two-tone brown, running bond, main entrance lobby.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	20	MAR-10

C3020.01.02 Paint Concrete Floor Finishes* 1971

Painted concrete floor with worn finish.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	10	MAR-10

Event: Repaint 380 m2 Concrete Floor Finish

Concern:
Surface finish is worn exposing substrate.

Recommendation:
Provide repairs as required and repaint concrete floor surfaces.

Consequences of Deferral:
Deterioration of substrate surface increasing repair costs.

Type	Year	Cost	Priority
Failure Replacement	2012	$19,000	Low

Updated: MAR-10

C3020.01.02 Paint Concrete Floor Finishes* 1979

Painted concrete floor with worn finish.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	10	MAR-10

Event: Repaint 440 m2 Concrete Floor Finish

Concern:
Surface finish is worn exposing substrate.
Recommendation:
Provide repairs as required and repaint concrete floor surfaces.
Consequences of Deferral:
Deterioration of substrate surface increasing repair costs.

Type	Year	Cost	Priority
Failure Replacement	2012	$22,000	Low

Updated: MAR-10

C3020.01.02 Paint Concrete Floor Finishes* 1997

Painted concrete floor with worn finish.

Rating	Installed	Design Life	Updated
3 - Marginal	1997	10	MAR-10

Event: Repaint 80 m2 Concrete Floor Finish

Concern:
Surface finish is worn exposing substrate.
Recommendation:
Provide repairs as required and repaint concrete floor surfaces.
Consequences of Deferral:
Deterioration of substrate surface increasing repair costs.

Type	Year	Cost	Priority
Failure Replacement	2011	$4,000	Low

Updated: MAR-10

C3020.02 Tile Floor Finishes** 1971

Quarry tile floor finish, 150 x 150 mm, brown-red colour, to kitchen storage room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

Event: Replace 15 Tile Floor Finishes

Type	Year	Cost	Priority
Lifecycle Replacement	2021	$5,300	Unassigned

Updated: MAR-10

C3020.02 Tile Floor Finishes** 1971

Ceramic tile floor finish 76 x 76 mm.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

Event: Replace 30 m2 Tile Floor Finishes

Type	Year	Cost	Priority
Lifecycle Replacement	2021	$6,500	Unassigned

Updated: MAR-10

C3020.07 Resilient Flooring** 1971

Resilient VCT flooring, 3.0 mm, colours vary, with rubber base, to staff locker and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	20	MAR-10

Event: Replace 25 m2 Resilient Flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$1,600	Unassigned

Updated: MAR-10

C3020.07 Resilient Flooring** 1971

Resilient flooring, 3.0 mm, colours vary, with integral cove base or rubber base.

Rating	Installed	Design Life	Updated
5 - Good	2007	20	MAR-10

Event: Replace 1670 m2 Resilient Flooring

Concern:
Resilient sheet flooring, colour and texture vary, with integral base and cap or with rubber base.

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$182,000	Unassigned

Updated: MAR-10

C3020.07 Resilient Flooring** 1979

Resilient flooring, 3.0 mm, colours vary, with integral cove base or rubber base.

Rating	Installed	Design Life	Updated
5 - Good	2004	20	MAR-10

Event: Replace 2020 m2 Resilient Flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2024	$247,309	Unassigned

Updated: MAR-10

C3020.07 Resilient Flooring** 1997

Resilient flooring, 3.0 mm, colours vary, with integral cove base or rubber base.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	MAR-10

Event: Replace 160 m2 Resilient Flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2017	$17,400	Unassigned

Updated: MAR-10

C3020.08 Carpet Flooring** 1979

Sheet carpet flooring, colours vary, low pile, with carpet base of rubber base.

Rating	Installed	Design Life	Updated
5 - Good	2004	15	MAR-10

Event: Replace 650 m2 Carpet Flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$54,300	Unassigned

Updated: MAR-10

C3030.01 Concrete Ceiling Finishes (Unpainted)*

Unpainted concrete ceiling and structural slab thickening.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	100	MAR-10

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)** 1971

Suspended ceiling assembly, white metal grid system, smooth face fissured tile.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	25	MAR-10

Event: Replace 700 m2 Acoustic Ceiling Treatment (Susp.T-Bar)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$40,000	Unassigned

Updated: MAR-10

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)** 1979

Suspended ceiling assembly, white metal grid system, smooth face fissured tile.

Rating	Installed	Design Life	Updated
5 - Good	2004	25	MAR-10

Event: Replace 1970 m2 Acoustic Ceiling Treatment (Susp.T-Bar)

Type	Year	Cost	Priority
Lifecycle Replacement	2029	$114,500	Unassigned

Updated: MAR-10

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)** 1997

Suspended ceiling assembly, white metal grid system, smooth face fissured tile.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	MAR-10

Event: Replace 320 m2 Acoustic Ceiling Treatment (Susp.T-Bar)

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$18,600	Unassigned

Updated: MAR-10

C3030.07 Interior Ceiling Painting* 1971

Painted ceilings, high to low sheen, for gypsum board and concrete.
Areas are repainted on a 10 year cycle.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	20	MAR-10

C3030.07 Interior Ceiling Painting* 1979

Painted ceilings, high to low sheen, for gypsum board and concrete. Areas are repainted on a 10 year cycle.

Rating	Installed	Design Life	Updated
5 - Good	2004	20	MAR-10

C3030.09 Other Ceiling Finishes* 1971

Cedar wood ceilings, T&G, clear finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-10

C3030.09 Other Ceiling Finishes* 1979

Stipple texture ceilings for 1971 and 1979 ceiling areas, painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	50	MAR-10

D1010.01.02 Hydraulic Passenger Elevators**

Passenger elevator, 2260 kg capacity (30 people), by Schindler, servied 2 floors, doors slide to 1 side, painted metal entrance panels and doors, interior plastic laminate panels, PVC flooring, panel lens ceiling, and stainless steel hand rail.

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-10

Event: Replace 1 Hydraulic Passenger Elevators

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$92,000	Unassigned

Updated: MAR-10

S4 MECHANICAL

D2010.04 Sinks** - 1971

600X600 mop sinks, molded stone, floor mounted , SS strainer. Typical of 4.
Single and double compartment stainless steel sinks complete with chrome plated swing spout, aerator, indexed lever handles. Typical of 30.
Stainless steel commercial sinks serving Kitchen and Laundry.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace Apprx. 48 Sinks

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$96,000	Unassigned

Updated: MAR-10

D2010.04 Sinks** - 1979

600X600 mop sink, molded stone, floor mounted , SS strainer. Typical of 1.
Single and double compartment stainless steel sinks complete with chrome plated swing spout, aerator, lever handles. Typical of 27.
Stainless steel commercial sinks serving medical labs. Typical of 8.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 36 Sinks

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$75,000	Unassigned

Updated: MAR-10

D2010.04 Sinks** - 1997

Mop sink, molded stone, floor mounted , SS strainer. Typical of 1.
Single and double compartment stainless steel sinks complete with chrome plated swing spout, aerator, indexed lever handles. Typical of 19.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

Event: Replace 20 Sinks

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$41,000	Unassigned

Updated: MAR-10

D2010.05 Showers** - 1979

Pressure balanced mixing valve with integral thermometer, hand spray with flex hose and in-line vacuum breaker. Fiberglass cabin.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace 4 Showers

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$10,000	Unassigned

Updated: MAR-10

D2010.05 Showers** - 1997

Fiberglass shower cabins with chrome grab bars. Thermostatic mixing valve, pressure balanced.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

Event: Replace 2 Showers

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$6,000	Unassigned

Updated: MAR-10

D2010.06 Bathtubs**

Assisted bath tub Bowl complete with automatic disinfections system, locking door, thermoscopic mixing valve. Typical of 2.
Porcelain enameled steel, slip resistant with overflow and waste fitting. Pressure balanced valve complete with thermometer, hand spray and hose. Typical of 10.

Rating	Installed	Design Life	Updated
4 - Acceptable	1998	30	MAR-10

Event: Replace 12 Bathtubs

Type	Year	Cost	Priority
Lifecycle Replacement	2028	$65,000	Unassigned

Updated: MAR-10

D2010.08 Drinking Fountains / Coolers** - 1979

Stainless steel refrigerated wall hung drinking fountains.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	35	MAR-10

Event: Replace 4 Drinking Fountains / Coolers

Type	Year	Cost	Priority
Lifecycle Replacement	2014	$16,000	Unassigned

Updated: MAR-10

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

WC - Floor mounted, vitreous china, open front seat, flush valve. Typical of 27.
LV - Vitreous china, wall hung and countertop c/w lever faucets. Typical of 30.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	MAR-10

Event: Replace 57 Washroom Fixtures

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$125,000	Unassigned

Updated: MAR-10

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1979

WC - Floor mounted, vitreous china, open front seat, flush valve. Typical of 17.
LV - Vitreous china, wall hung and countertop c/w lever faucets. Typical of 20.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	35	MAR-10

Event: Replace 37 Washroom Fixtures

Type	Year	Cost	Priority
Lifecycle Replacement	2014	$82,000	Unassigned

Updated: MAR-10

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1997

WC - Floor mounted, vitreous china, open front seat, flush valve. Typical of 5.
LV - Vitreous china, wall hung and countertop c/w lever faucets. Typical of 7.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	35	MAR-10

Event: Replace 12 Washroom Fixtures

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$26,000	Unassigned

Updated: MAR-10

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping distribution throughout. Water supply to the building is located in the basement of the 1979 section.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

D2020.01.02 Valves: Domestic Water** - 1971

Ball and globe isolation valves.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	40	MAR-10

Event: Replace Domestic Water Valves

Concern:
Many valves are non functional or leaking.
Recommendation:
Replace domestic water valves.

Type	Year	Cost	Priority
Failure Replacement	2012	$103,000	Medium

Updated: MAR-10

D2020.01.02 Valves: Domestic Water** - 1979

Ball and globe isolation valves.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	40	MAR-10

Event: Replace Domestic Water Valves

Concern:
Many valves are non functional or leaking.
Recommendation:
Replace domestic water valves.

Type	Year	Cost	Priority
Failure Replacement	2012	$80,000	Medium

Updated: MAR-10

D2020.01.02 Valves: Domestic Water** - 1997

Ball and globe isolation valves. All plumbing fixtures isolated.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

Event: Replace Domestic Water Valves

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$16,000	Unassigned

Updated: MAR-10

D2020.01.03 Piping Specialties (Backflow Preventors)**

Reduced pressure backflow preventers serving incoming domestic water line.
Double check valve assembly on 150mm diameter fire line from siamese connection.
Backflow prevention installed on boiler make-up water.
Double check valve arrangement serving chilled water system.
Vacuum breakers serving NFHB.

Rating	Installed	Design Life	Updated
3 - Marginal	2005	20	MAR-10

Event: Replace Backflow Preventor

Concern:
The backflow preventer installed on the line servicing 1979 and 1997 buildings is experiencing failure in its secondary backup system.
Recommendation:
Replace backflow preventer.

Type	Year	Cost	Priority
Failure Replacement	2012	$8,000	Medium

Updated: MAR-10

Event: Replace Backflow Preventors

Type	Year	Cost	Priority
Lifecycle Replacement	2025	$75,000	Unassigned

Updated: MAR-10

D2020.02.02 Plumbing Pumps: Domestic Water**

Eight in-line domestic hot water recirculation pumps serving domestic hot water systems.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	20	MAR-10

Event: Replace 8 Plumbing Pumps

Type	Year	Cost	Priority
Lifecycle Replacement	2023	$24,000	Unassigned

Updated: MAR-10

D2020.02.04 Domestic Water Conditioning Equipment**

Duplex water softener package complete with brine tank.

Rating	Installed	Design Life	Updated
5 - Good	2007	20	MAR-10

Event: Replace Domestic Water Conditioning Equipment

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$40,000	Unassigned

Updated: MAR-10

D2020.02.06 Domestic Water Heaters** - 1971

Domestic hot water for the 1971 building is fed from 2000l tank complete with steam coil which is fed from the main heating system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	20	MAR-10

Event: Replace Domestic Water Heater

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$40,000	Unassigned

Updated: MAR-10

D2020.02.06 Domestic Water Heaters** - 1979

Two Laars gas fired domestic hot water boilers serving 1979 section complete with 400l storage tank and recirculation system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	20	MAR-10

Event: Replace Domestic Hot Water System

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$85,000	Unassigned

Updated: MAR-10

D2020.03 Water Supply Insulation: Domestic*

Water piping insulated with fiberglass insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

D2030.01 Waste and Vent Piping* - 1971&1979

Some portion of original piping has been abandoned and replaced. The original piping has been upgraded to to PVC. Original cast iron piping in selected areas.

Rating	Installed	Design Life	Updated
3 - Marginal	1971	50	MAR-10

Event: Replace original sewer lines.

Concern:

Most of the building sanitary waste drains into a central stack which is causing frequent plugging issues.
Original cast iron lines deteriorate and experience ongoing maintenance issues.

Recommendation:

The stack should be investigated to determine the problem and correct it.
Original cast iron lines should be replaced with new plastic pipes.

Type	Year	Cost	Priority
Failure Replacement	2012	$210,000	Medium

Updated: MAR-10

Event: Study underground pipng.

Concern:

Most of the building sanitary waste drains into a central stack which is causing frequent plugging issues.

Recommendation:

Provide camera test for underground piping lines.

Type	Year	Cost	Priority
Study	2011	$2,000	Medium

Updated: MAR-10

D2030.01 Waste and Vent Piping* - 1997

ABS and copper lines. All plumbing fixtures vented up through the roof. Sewer is handled via two separate systems. The sanitary waste from the north end of the addition ties into the sewer system servicing original building, the south of the addition runs to separate ABS service.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	MAR-10

D2030.03 Waste Piping Equipment*

Grease trap serving Kitchen sinks.
Double compartment mud interceptor.
Oil interceptor.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

D2040.01 Rain Water Drainage Piping Systems*

Cast iron and PVC.
Rain water collection via roof drains and storm water piping to splash pads.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

D2040.02.04 Roof Drains*

Cast iron, open flow roof drains throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

D2090.10 Nitrous Oxide Gas Systems**

Nitrous oxide is distributed off a header connected to four bottles in the shop receiving area.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	30	MAR-10

Event: Replace Nitrous Oxide Gas System

Type	Year	Cost	Priority
Lifecycle Replacement	2033	$135,000	Unassigned

Updated: MAR-10

D2090.11 Oxygen Gas Systems**

The oxygen system is is outside of the 1971 Mechanical Room. A bulk tank supplies the hospitals oxygen needs. Several smaller back up bottles are provided.

Rating	Installed	Design Life	Updated
4 - Acceptable	1989	30	MAR-10

Event: Repair Oxygen Gas Systems

Concern:
The oxygen system is undersized for the demand placed on it.
Recommendation:
It is recommended that additional oxygen storage be added to fulfill hospital requirements.

Type	Year	Cost	Priority
Program Functional Upgrade	2012	$25,000	Low

Updated: MAR-10

Event: Replace Oxygen Gas System

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$250,000	Unassigned

Updated: MAR-10

D2090.13 Vacuum Systems (Medical)**

Vacuum drawn by duplex vacuum pump complete with piping and exhaust mufflers , located in 1971 Mechanical Room.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	MAR-10

Event: Replace Vacuum System

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$220,000	Unassigned

Updated: MAR-10

D2090.16 Medical Air System*

Medical air consists of an oil less compressor located in 1979 Mechanical Room, with an eight bottle backup system connected to the distribution lines.

Rating	Installed	Design Life	Updated
3 - Marginal	1994	0	MAR-10

Event: Repair medical air system.

Concern:
The dryers on the medical air system are undersized, additional capacity is required.
Recommendation:
Replace dryers.

Type	Year	Cost	Priority
Repair	2012	$35,000	Low

Updated: MAR-10

Event: Replace outletets.

Concern:
There is concern over multiple fitting styles on medical gas outlets. Fitting types should be standardized throughout the hospital.
Recommendation:
Replace existing outlets with new diameter index safety system style type.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2012	$35,000	Low

Updated: MAR-10

D3010.01 Oil Supply Systems (Fuel, Diesel)*

4200 liters double wall above ground diesel tank located outside North of the 1971 Mechanical Room.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	60	MAR-10

D3010.02 Gas Supply Systems*

Welded black iron gas service, medium pressure.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	60	MAR-10

D3020.01.01 Heating Boilers & Accessories: Steam**

Boiler plant serving 1971 section consist of four steam boilers and one back-up diesel fired unit.
B-1 Cleaver Brooks WTHP-500, 120kW.
B-2 Cleaver Brooks WTHP-1250, 370 kW.
B-3 Cleaver Brooks WTHP-1250, 370 kW.
B-4 Cleaver Brooks WTHP-1250, 370 kW.
B-5 Smith, cast iron 840 kW.

Boiler B-2 - dry layup.
Boiler B-3 O.R. Provides steam humidification.
Boiler B-1 - high pressure steam boiler for CSR.
Boiler B-4 - humidification boiler supplying air handling.

All steam traps are original, some stop and pop valves recently replaced.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	MAR-10

Event: Replace Heating Boilers & Accessories: Steam

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$400,000	Unassigned

Updated: MAR-10

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

Vents up through the roof. Combustion air up to code.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	MAR-10

Event: Replace Chimneys &Comb. Air

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$20,000	Unassigned

Updated: MAR-10

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

Boiler plant serving 1979 wing consists of three Raytherm 2001 boilers, 600 kW heating output each. These boilers supply hot water to radiant panels, unit heaters and air handling units.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	35	MAR-10

Event: Investigate Pipe Insulation for Asbestos Presence

Concern:
Existing piping main contain asbestos in pipe insulation.
Recommendation:
Investigate pipe insulation for asbestos presence.

Type	Year	Cost	Priority
Study	2012	$5,000	Medium

Updated: MAR-10

Event: Remove Asbestos if required

Type	Year	Cost	Priority
Hazardous Materials Abatement	2013	$65,000	Unassigned

Updated: MAR-10

Event: Replace Heating Boilers and Accessories

Concern:
Boilers deteriorate, have reduced efficiencies and increased maintenance support. Boiler plant piping and victaulic fittings leak at low temperatures and valves are failing. Possible asbestos in pipe insulation.
Recommendation:
Replace boiler plant.

Type	Year	Cost	Priority
Failure Replacement	2012	$265,000	Medium

Updated: MAR-10

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

Galvanized steel vents up through the roof.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	30	MAR-10

Event: Replace Chimneys &Comb. Air

Concern:
Chimney venting exhaust from the basement mechanical room are terminated at different heights on the roof, which results in flues backdrafting and corrosion problem.

Recommendation:
Replace chimneys.

Type	Year	Cost	Priority
Failure Replacement	2012	$45,000	Medium

Updated: MAR-10

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

Chemical pot feeder, by-pass filter, by-pass filter cartridge, in-line flow restrictor device.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

D3030.03 Reciprocating Water Chillers**

Reciprocating water chiller manufactured by Carrier is locateed inside 1979 Mechanical Room. Chiller is complete with one 3-stage compressor and two 2-stage compressors. Total chiller capacity is 87 tons. Chiller uses R-22 refrigerant. Roof mounted air cooled condenser handles the dissipation of heat into the atmosphere that is created from the chiller.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	25	MAR-10

Event: Replace Reciprocating Water Chiller

Concern:
Existing chiller is obsolete and has efficiency well below designed. One of the compressors was recently replaced suggesting replacement of the other remaining units. Replacement parts are difficult to find.

Recommendation:
Replace existing chiller with new unit.

Type	Year	Cost	Priority
Failure Replacement	2012	$565,000	Medium

Updated: MAR-10

D3030.06.02 Refrigerant Condensing Units**

Fujitsu and Carrier ductless split air conditioning systems serve various parts of the building. Total of three refrigerant condenser located on 1971 and 1979 roofs complete with refrigerant piping to indoor evaporators.

Rating	Installed	Design Life	Updated
3 - Marginal	2000	25	MAR-10

Event: Replace 3 Split AC Systems

Type	Year	Cost	Priority
Lifecycle Replacement	2025	$105,000	Unassigned

Updated: MAR-10

Event: Replace Cooling System Serving Morgue.

Concern:
The split system for the morgue is reported as not being adequate to maintain the proper temperature within the room.
Recommendation:
Replace split AC system.

Type	Year	Cost	Priority
Failure Replacement	2011	$35,000	Medium

Updated: MAR-10

D3040.01.01 Air Handling Units: Air Distribution** - 1971 Wing

The 1971 wing air handling units are 4 gas fired roof top units supplying ventilation to that area. The four roof top units serve the following areas: kitchen, laundry, O.R.unit and acute care - north wing. Laundry unit was replaced in 1998, the other three units were installed in 1992.
All units are manufactured by Engineered Air. All units are complete with dx cooling coils and packaged condensing unit. Units capacities vary from 1000 l/s to 3500 l/s.

Rating	Installed	Design Life	Updated
4 - Acceptable	1992	30	MAR-10

Event: Replace 1 Air Handling Unit Installed in 1998

Type	Year	Cost	Priority
Lifecycle Replacement	2028	$125,000	Unassigned

Updated: MAR-10

Event: Replace 3 Air Handling Units Installed in 1992.

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$450,000	Unassigned

Updated: MAR-10

D3040.01.01 Air Handling Units: Air Distribution** - 1979 Wing

1979 wing is served by two indoor air handling units located in basement mechanical room. Both units are manufactured by Canadian Blower and have supply air capacity of 6000 l/s. Both units are complete with supply and return air fans, humidification section and heating coils.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	30	MAR-10

Event: Replace 2 Air Handling Units

Concern:
Both units deteriorate and replacement parts are no longer available. There are concerns over air leakage on the units.

Recommendation:
Replace two indoor air handling units.

Type	Year	Cost	Priority
Failure Replacement	2012	$250,000	Medium

Updated: MAR-10

D3040.01.01 Air Handling Units: Air Distribution** - 1997 Wing

One packaged gas fired air handling unit complete with coolin serving Emergency. Engineered Air model DJ-20/FWA-92, 1300 l/s supply air.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

Event: Replace 1 Air Handling Unit

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$75,000	Unassigned

Updated: MAR-10

D3040.01.03 Air Cleaning Devices:Air Distribution*

Replaceable media filters serving air handling units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

D3040.01.04 Ducts: Air Distribution*

Galvanized steel ductwork distribution throughout. Dual duct system to mixing boxes in 1979 section. All ducts are up to SMACNA standards.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

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

Constant and variable volume, dual duct boxes, fan powered terminal boxes provide cooling and ventilation with 100% primary air shut-off. Airflow varies from 45 to 500 l/s.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace Approx. 60 Air Terminal Units

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$125,000	Unassigned

Updated: MAR-10

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Combination of wall mounted grilles, troughers and ceiling square diffusers for supply air application.
Egg crate type grilles for return, transfer and exhaust air.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

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

Steam generator complete with feed lines, receiver tank with pumps, blow down tank, high pressure steam lines distribution, storage tank, still, cold water supply etc.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace Steam Distribution System

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$305,000	Unassigned

Updated: MAR-10

D3040.03.01 Hot Water Distribution Systems** - 1971

Steel and copper piping distribution from boilers to secondary loops.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace Hot Water Distribution Systems (3200 sqm)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$295,000	Unassigned

Updated: MAR-10

D3040.03.01 Hot Water Distribution Systems** - 1979

Steel and copper piping distribution from boilers to secondary loops.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: Replace Hot Water Distribution System (3200 sqm)

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$295,000	Unassigned

Updated: MAR-10

D3040.03.02 Chilled Water Distribution Systems**

150mm diameter CWS and CWR lines serving chiller and condenser. 150mm diameter chilled water loop to cooling coils serving air handling units.
Two base mounted circulation pumps, one condenser pump, one chilled water pump and one stand-by pump.
Copper and steel pipes.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	40	MAR-10

Event: Replace Chilled Water Distribution System (6000sqm)

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$305,000	Unassigned

Updated: MAR-10

D3040.04.01 Fans: Exhaust** - 1971

Roof mounted exhaust fans are upblast centrifugal and inline cabinet.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace Approx. 9 Exhaust Fans

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$18,000	Unassigned

Updated: MAR-10

D3040.04.01 Fans: Exhaust** - 1979

Exhaust fans are upblast centrifugal, inline cabinet, centrifugal blowers with forward curved wheels etc.
Five main exhaust system cover 1979 addition, each of these fans is tied in to heat recovery system. Additional fans exhaust air from the east end, west end, chiller room and elevator shaft.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 11 Exhaust Fans

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$45,000	Unassigned

Updated: MAR-10

D3040.04.01 Fans: Exhaust** - 1997

Two roof mounted dome type exhaust fans.

Rating	Installed	Design Life	Updated
5 - Good	1997	30	MAR-10

Event: Replace 2 Exhaust Fans

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$6,000	Unassigned

Updated: MAR-10

D3040.04.03 Ducts: Exhaust*

Medium and low velocity galvanized steel exhaust ducts up to SMACNA standards.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

D3040.04.05 Air Outlets and Inlets: Exhaust*

Egg crate and louver face return grilles are used for exhaust air application.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

D3040.05 Heat Exchangers**

Shell tube heat exchanger located in 1979 Mechanical Room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace Heat Exchanger

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$30,000	Unassigned

Updated: MAR-10

D3050.03 Humidifiers** - 1971

Duct mounted Dryomatic 4B humidifiers serving 1971 wing.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	25	MAR-10

Event: Replace 14 Humidifiers

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$60,000	Unassigned

Updated: MAR-10

D3050.03 Humidifiers** - 1979

Steam grid humidifiers serving two indoor air handling units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	25	MAR-10

Event: Replce 2 Humidifiers

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$25,000	Unassigned

Updated: MAR-10

D3050.05.02 Fan Coil Units** - 1971

Recessed force flow heaters complete with hot water heating coils serving vestibules.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace 5 Fan Coil Units

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$25,000	Unassigned

Updated: MAR-10

D3050.05.02 Fan Coil Units** - 1979

Recessed force flow heaters complete with hot water heating coils serving vestibules.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace 4 Fan Coil Units

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$20,000	Unassigned

Updated: MAR-10

D3050.05.03 Finned Tube Radiation**

Perimeter wall fin radiation complete with various type enclosure cabinets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace Finned Tube Radiation (5500sqm)

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$290,000	Unassigned

Updated: MAR-10

D3050.05.06 Unit Heaters**

Cabinet horizontal and vertical discharge hot water unit heaters serving Ambulance Bay and Mechanical Rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace 8 Unit Heaters

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$32,000	Unassigned

Updated: MAR-10

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

Radiant ceiling panels serving Patients Rooms, 610mm width aluminum linear type, mounted in the T-bar, or GWB ceiling along the perimeter wall.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	35	MAR-10

Event: Replace Radiant Heating (Ceiling) (approx 160 panels)

Type	Year	Cost	Priority
Lifecycle Replacement	2040	$160,000	Unassigned

Updated: MAR-10

D3060.02.02 Pneumatic Controls**

Pneumatic thermostats and control valves.
Duplex air compressors complete with refrigerated dryers.
Two dessicant air dryers located in the 1971 mechanical room and one unit in 1979 mechanical room.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	40	MAR-10

Event: Replace Pneumatic Controls

Concern:
The controls system is outdated, with many of the controls being obsolete. There have been parts supply issued with many of the controls, as manufacturers no longer stock, or make parts.
Recommendation:
Replace control system with new DDC.

Type	Year	Cost	Priority
Failure Replacement	2012	$165,000	Medium

Updated: MAR-10

D4010 Sprinklers: Fire Protection*

1997 building is sprinklered as per NFPA13. Automatic sprinkler system consists of wet pipes. Automatic wet pipe sprinkler alarm valve.
Fire department connection at the front entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	60	MAR-10

D4020 Standpipes*

Standpipe system with cabinets provided in 1971 and 1979 sections.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	60	MAR-10

D4030.01 Fire Extinguisher, Cabinets and Accessories*

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

Rating	Installed	Design Life	Updated
5 - Good	1997	30	MAR-10

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

Range Guard kitchen fire suppression system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	40	MAR-10

Event: Replace Dry Chemical Fire Extinguishing Systems (Kitchen Hood)

Type	Year	Cost	Priority
Lifecycle Replacement	2037	$25,000	Unassigned

Updated: MAR-10

D4090.07 Fire Pumps & Water Storage Tanks*

Aurora fire pump, 16 l/s flow.

Rating	Installed	Design Life	Updated
3 - Marginal	1979	40	MAR-10

Event: Repair Fire Pump

Concern:
The pump need to be rebuilt due to lack of discharge pressure. Currently pumps achieve only 60psi and should have minimum discharge pressure of 90 psi.
Recommendation:
Rebuilt pump motor to allow for larger discharge pressure.

Type	Year	Cost	Priority
Repair	2011	$20,000	Medium

Updated: MAR-10

S5 ELECTRICAL

D5010.01 Main Electrical Transformers**

The Main Transformer is a 300KVA padmount transformer and was replaced in 2007.

Rating	Installed	Design Life	Updated
6 - Excellent	2007	40	MAR-10

Event: Replace Main Transformer

Type	Year	Cost	Priority
Lifecycle Replacement	2047	$30,000	Unassigned

Updated: MAR-10

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

The Main Distribution Panel is a ITE 1600Amp 120/208 volt 4wire installed in 1971.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	40	MAR-10

Event: Replace Main Switchboard

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$33,000	Unassigned

Updated: MAR-10

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 1971

The Panelboards in the 1971 part of the building are made by ITE.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace Panelboards

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$40,000	Unassigned

Updated: MAR-10

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 1979

The panelboards in the 1979 part of the hospital are made by Westinghouse.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace Panelboards

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$30,000	Unassigned

Updated: MAR-10

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 1997

The panelboards in the 1997 part of the hospital are made by Cutler- Hammer

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

Event: Replace Panelboards

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$50,000	Unassigned

Updated: MAR-10

D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers** - 1971

The MCC,s in the 1971 section of the hospital are made by Klockner-Moeller

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace Motor Control Center

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$56,000	Unassigned

Updated: MAR-10

D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers** - 1979

The MCC,s in the 1979 section of the hospital are made by Westinghouse.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

Event: Replace Motor Control Center

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$84,000	Unassigned

Updated: MAR-10

D5010.07.02 Motor Starters and Accessories**

The Motor Starters are a mixture of Square D, Westinghouse and Cutler- Hammer and are located close to the motors they serve.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace Motor Starters

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$5,000	Unassigned

Updated: MAR-10

D5020.01 Electrical Branch Wiring* - 1971

The branch wiring in the 1971 section of the hospital consists of armored cable,EMT conduit and wire and Teck Cable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	50	MAR-10

D5020.01 Electrical Branch Wiring* - 1979

In the 1979 section of the hospital the wiring consists of EMT conduit and wire,armored cable and Tech cable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	50	MAR-10

D5020.01 Electrical Branch Wiring* - 1997

In the 1997 section of the hospital the branch wiring consists of EMT and wire and armored cable.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	50	MAR-10

D5020.01 Electrical Branch Wiring* - 2005

The wiring the 2005 section of the hospital consists of TecK cable,EMT conduit and wire,and armored cable.

Rating	Installed	Design Life	Updated
5 - Good	2005	50	MAR-10

D5020.02.01 Lighting Accessories (Lighting Controls)*

The lighting controls in the hospital consists of GE low voltage switching and line voltage switching(120 Volts)

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

D5020.02.02.01 Interior Incandescent Fixtures*

The interior incandescent lighting is being replaced by CFL light bulbs.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	30	MAR-10

D5020.02.02.02 Interior Florescent Fixtures**

The interior florescent fixtures are being replaced by energy efficient T-8 lights and electronic ballasts when the T-12 lights burn out and need changing.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	30	MAR-10

Event: Energy Efficiency Upgrade Remaining Square Meters(1700)

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2012	$148,000	Low

Updated: MAR-10

Event: Lifecycle Replacement of Florescent Fixtures (5668sq. meters)

Type	Year	Cost	Priority
Lifecycle Replacement	2035	$495,000	Unassigned

Updated: MAR-10

D5020.02.03.01 Emergency Lighting Built-in*

The emergency built in lighting is being replaced by energy efficient T-8 lights and electronic ballasts when the T-12 lights are burnt out.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	35	MAR-10

D5020.02.03.03 Exit Signs*

The exit lighting is by Lumacell and in an emergency situation is energized through the Emergency Generator System.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

D5020.02.11 Operating Room Lighting*

The operating room lighting is energized in emergency situations from the Emergency Generator Systems.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	0	MAR-10

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

The exterior lighting consists of 70watt and 100watt fixtures located at each point of access and egress through out the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

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

The lighting controls for the exterior lighting is a PEC controller located on the roof of the facility.

Rating	Installed	Design Life	Updated
4 - Acceptable	1979	30	MAR-10

D5030.01 Detection and Fire Alarm**

The Fire Alarm System consists of a 4100U Simplex Panel with a remote annunciator located by the main door,the main nurses station and the emergency nurses station and a 4100 ID NAC EXTENDER Panel for the signal booster.The system also includes smoke and heat detectors and bells and strobe signaling devices

Rating	Installed	Design Life	Updated
5 - Good	2007	25	MAR-10

Event: Replace Fire Alarm System

Type	Year	Cost	Priority
Lifecycle Replacement	2031	$164,000	Unassigned

Updated: MAR-10

D5030.02.01 Door Answering*

There is a doorbell at the emergency man door for after hour emergencies.

Rating	Installed	Design Life	Updated
5 - Good	1997	25	MAR-10

D5030.02.02 Intrusion Detection**

The intrusion detection consists of motion sensors located throughout the hospital.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	MAR-10

Event: Replace Intrusion Detection (5668sq. meters)

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$164,000	Unassigned

Updated: MAR-10

D5030.02.03 Security Access**

There are Altronix Card readers at each area of access to the facility.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	25	MAR-10

Event: Replace Security Access (9 Card readers)

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$59,000	Unassigned

Updated: MAR-10

D5030.02.04 Video Surveillance**

There are 7 Panasonic Cameras located through out the facility.These are monitored at the internal Security Office.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	MAR-10

Event: Replace Video Surveillance Cameras

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$47,000	Unassigned

Updated: MAR-10

D5030.03 Clock and Program Systems*

The clocks are battery operated stand alone clocks

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	25	MAR-10

D5030.04.01 Telephone Systems*

The telephone system consists of Nortel handsets through out the facility along with a wireless system using a Nortel MG1000 router.
Both systems are backed up by APC 1500 Watt Smart UPS Batteries.

Rating	Installed	Design Life	Updated
4 - Acceptable	2007	25	MAR-10

D5030.04.03 Call Systems**

The nurse call system is through the Responder 3000 System.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	25	MAR-10

Event: Replace Call Systems

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$34,000	Unassigned

Updated: MAR-10

D5030.04.04 Data Systems*

The data system is through the Nortel Contivity 1740 router c/w a APC Smart UPS 1500 Watt back-up system.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	25	MAR-10

D5030.04.05 Local Area Network Systems*

The local area network system is through the Alberta Supernet by Bell.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	15	MAR-10

D5030.05 Public Address and Music Systems**

The public address system consists of a Interm PA 935 Amplifier and a Interm PA 4000 Public Address Amplifier.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	25	MAR-10

Event: Replace Sound System

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$6,000	Unassigned

Updated: MAR-10

D5030.06 Television Systems*

The television system is through Persona CableVision.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	20	MAR-10

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

The genset is a 3306 Cat engine with a 281 KVA 480 Volt generator attached.
This is run through a Thompson Technology Integrated Transfer Switch.

Rating	Installed	Design Life	Updated
5 - Good	1999	35	MAR-10

Event: Replace Engine Generator System

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$130,000	Unassigned

Updated: MAR-10

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1010.06 Commercial Laundry and Dry Cleaning Equipment*

Commercial washers and dryers not in use. Laundry Goods are shipped to Red Deer.
Wascomat Washer (2)
Speed Queen (1)
Cissell Dryer (1)
Residental washer and dryer - 1 set
Mobile laundry stainless steel storage racks.
Wash sink.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-10

E1090.03 Food Service Equipment*

Equipment upgraded ion 2000.
Food Storage Equipment: Walk-in cooler and freezer, stainless steel storage racking, reach-in fridges, metal dry storage racking, reach-in cooler and freezer
Food Preparation Equipment: stainless prep counters and over shelves, mixer.
Food Cooking Equipment: ovens, range hood, microwaves, convection oven.
Food Serving Equipment: Stainless service tray, mobile carts.
Food Cleaning Equipment: Commercial washers, wash and drain trays, deep compartment sinks, stainless over shelving
Pop machines.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	25	MAR-10

E1090.04 Residential Equipment*

Fridges, stoves, and microwaves.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	10	MAR-10

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Treadmill, reclined bike, parallel bar, physio beds and chairs.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	15	MAR-10

E2010.02 Fixed Casework** 1971

Assemblies include:
-plastic laminate concealed face liner and exposed faces with plastic laminate or stainless steel counter tops.
-clear birch of fir with clear seal finish and plastic laminate counter tops.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	35	MAR-10

Event: Replace 40 m Fixed Casework

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$40,000	Unassigned

Updated: MAR-10

E2010.02 Fixed Casework** 1979

Assemblies include melamine concealed faces with either melamine or plastic laminate exposed faces with plastic laminate counter tops.
Edging is PVC, plastic laminate wood with clear finish.

Rating	Installed	Design Life	Updated
5 - Good	2004	35	MAR-10

Event: Replace 155 m Fixed Casework

Type	Year	Cost	Priority
Lifecycle Replacement	2039	$156,000	Unassigned

Updated: MAR-10

E2010.02 Fixed Casework** 1997

Assemblies include melamine or wood veneer, concealed faces with either melamine or wood veneer faces with plastic laminate counter tops, and edging is PVC.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	35	MAR-10

Event: Replace 100 m Fixed Casework

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$100,400	Unassigned

Updated: MAR-10

E2010.03.01 Blinds** 1971

Vertical PVC blinds and horizontal prefinished metal blinds, with and without valances, colours vary.
Horizontal fabric blinds with valance.
Roller shades, fabric and black-out, with and without valances.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	30	MAR-10

Event: Replace 95 m2 Blinds

Type	Year	Cost	Priority
Lifecycle Replacement	2013	$13,500	Unassigned

Updated: MAR-10

E2010.03.01 Blinds** 1979

Vertical PVC blinds and horizontal prefinished metal blinds, with and without valances, colours vary (10 m2).
Roller shades with grey screens and overhead casettes, manual operation (120 m2).

Rating	Installed	Design Life	Updated
5 - Good	2004	30	MAR-10

Event: Replace 130 m2 Blinds

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$18,500	Unassigned

Updated: MAR-10

E2010.03.01 Blinds** 1997

Vertical PVC blinds, with valances, colours vary.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	30	MAR-10

Event: Replace 11 m2 Blinds

Type	Year	Cost	Priority
Lifecycle Replacement	2027	$1,600	Unassigned

Updated: MAR-10

F1010.02.04 Portable and Mobile Buildings**

Description: This building is a double wide unit. Portable building located to the north side of the building. This building is used for health information (medical records). The building is connected to the 1997 building via a link with ramp. The portable unit was added in 2009. The area of the building and link is 220 m2.

Envelope: Prefinished metal siding with vertical application on insulated wood framed wall assembly. PVC windows provide light into the interior. The building roof is rolled roofing with center parapet. The link has asphalt shingle roofing. The portable building sits on a concrete structural slab. Envelope system replacement cost: $90,000.00.

Interior: The walls have prefinished gypsum with vertical batts, the ceilings have acoustic T-bar, and the floors have resilient flooring with carpeting in the lounge portion. Interior finishes replacement cost: $40,000.00.

Mechanical: Stand-alone mechanical heating unit(s), 2 only, mounted tot he exterior. Two Baard packaged outdoor gas fired furnaces, approximate heating capacity of 40 kW, approximate air flow of 720 l/s. Overhead ductwork distribution via ceiling space to square diffusers. Mechanical system replacement cost: $25,000.00

Electrical: Electrical service connection to main building. Single 100 amp Cutler-Hammer panel feeding portable and car plugs. Fluorescent lights 18 recessed and surface mounted, exit signs, fire alarm and smoke detectors. Electrical replacement cost $15,000.00

Rating	Installed	Design Life	Updated
5 - Good	2009	30	MAR-10

Event: Replace - Electrical

Type	Year	Cost	Priority
Lifecycle Replacement	2039	$15,000	Unassigned

Updated: MAR-10

Event: Replace - Envelope

Type	Year	Cost	Priority
Lifecycle Replacement	2039	$90,000	Unassigned

Updated: MAR-10

Event: Replace - Interior Finishes

Type	Year	Cost	Priority
Lifecycle Replacement	2039	$40,000	Unassigned

Updated: MAR-10

Event: Replace - Mechanical

Type	Year	Cost	Priority
Lifecycle Replacement	2039	$25,000	Unassigned

Updated: MAR-10

F1040.05 Liquid and Gas*: Storage Tanks*

The medical gas stored within interior rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	20	MAR-10

F2020.01 Asbestos*

Asbestos may be present in Boiler Room piping insulation. Refer to events under D3020.02.01 Heating Boilers and Accessories: H.W.**

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

F2020.02 PCBs*

No PCBs reported.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

F2020.04 Mould*

No mould reported.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

F2020.06 Radioactive Compounds*

No radioactive compounds reported.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

F2020.07 Chloroflorocarbons (CFC Refrigerants)*

R-22 refrigerant is being used.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

F2020.08 Biohazardous Materials*

Biohazard wastes are contained and disposed of under contract.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

S8 FUNCTIONAL ASSESSMENT

K2010.01 Building Entrance/ Reception (location)

Rating	Installed	Design Life	Updated
3 - Marginal	2004	0	MAR-10

Event: Front Entry Renovation

Concern:

The front entry is busy, cluttered, cold in the winter and hard to keep clean. The increase in public traffic and the addition and expansion of five more services will intensify the problem. Enclose the front covered entry area - 26"" x 21"" and provide space for wheelchairs, boot racks, strollers and seating need for public.

Recommendation:

Enclose front covered entry area and provide space for wheelchairs, boot racks, strollers and seating need for public.

Type	Year	Cost	Priority
Program Functional Upgrade	2010	$86,080	Unassigned

Updated: MAR-10

Event: Main Entrance Renovation

Concern:

The front entrance of the Hospital looks drab and could use improvement.

Recommendation:

Improve the drab look of the main entrance to the hospital.

Type	Year	Cost	Priority
Program Functional Upgrade	2010	$134,500	Unassigned

Updated: MAR-10

K2020 Program Location

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	MAR-10

Event: Equipment shelter for Material Management

Concern:

This is a safety issue as Material Management items impact safety exits. 6 ft w X 8 ft l, side rails all the way around with removable front and rear rails, must rise 51" from ground. Site preparation and installation are also required.

Recommendation:

Construct an equipment shelter for Material Management.

Type	Year	Cost	Priority
Program Functional Upgrade	2010	$43,040	Unassigned

Updated: MAR-10

K2030 Program Layout

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	MAR-10

Event: Acute Care ER Expansion

Concern:
Acute Care ER requires expansion and new layout
Recommendation:
Redesign the ER entry to the west side of the building with the addition of a waiting room, triage room, and registration space to the building.

Type	Year	Cost	Priority
Program Functional Upgrade	2010	$430,400	Unassigned

Updated: MAR-10

Event: Construct Unheated Storage Building

Concern:
There is insufficient storage space.
Recommendation:
As a result of space use relocation, there is a need for secure dry storage space. All departments are asking for space that no longer exists since the basement was redeveloped.

Type	Year	Cost	Priority
Program Functional Upgrade	2010	$32,280	Unassigned

Updated: MAR-10

K4010.01 Barrier Free Route: Parking to Entrance*

Level access is provided from parking area to the main entrance via a short ramp.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

K4010.02 Barrier Free Entrances*

The main entrance has automatic controls and sliding doors.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

K4010.03 Barrier Free Interior Circulation*

The horizontal circulation is good throughout the facility.

Rating	Installed	Design Life	Updated
4 - Acceptable	2009	0	MAR-10

K4010.04 Barrier Free Washrooms*

The washrooms are barrier-free throught the facility except for the 1971 north wing.
1971 North Wing: Patient room washroom are not barrier-free.

Rating	Installed	Design Life	Updated
3 - Marginal	2009	0	MAR-10

Event: Code Upgrade 11 Patient Washrooms

Concern:
Washrooms in patients rooms are not barrier-free.
Recommendation:
Provide one barrier-free washroom serving patient rooms, with toilet and hand sink. Eleven washroom are required.
Consequences of Deferral:
Increased staff time to assist patients.

Type	Year	Cost	Priority
Code Upgrade	2013	$220,000	Medium

Updated: MAR-10

K4020 Building Code

No floor firestopping was observed.

Rating	Installed	Design Life	Updated
4 - Acceptable	1971	0	MAR-10

Event: Study Firestopping

Concern:
No firestopping was observed. Refer to C1010.07 B1010.10 Floor Construction Firestopping* and Interior Partition Firestopping*.
Recommendation:
Conduct study for partition firestopping, identify locations, recommend firestopping systems, and provide estimate of probable costs.
Consequences of Deferral:
Exposure to unsafe conditions during a fire.

Type	Year	Cost	Priority
Study	2010	$5,000	Medium

Updated: MAR-10