RECAPP Facility Evaluation Report

Edmonton School District No. 7



John A. McDougall Elementary / Junior High School
B3210A
Edmonton

Facility Details

Building Name: John A. McDougall Elementa

Address: 10930 - 107 Street

Location: Edmonton

Building Id: B3210A
Gross Area (sq. m): 5,485.00
Replacement Cost: \$14,613,575

Construction Year: 1930

Evaluation Details

Evaluation Company: Francis Ng Architect Ltd.

Evaluation Date: June 18 2009

Evaluator Name: Francis Ng

Total Maintenance Events Next 5 years: \$442,450 5 year Facility Condition Index (FCI): 3.03%

General Summary:

This school for Grades K through 9 was originally built in Edmonton in 1930. The school faces four streets - 107 Street on the East; 109 Avenue on the South; 108 Street on the West and 110A Avenue on the North. It is under the jurisdiction of Edmonton School District No. 7. The current student enrollment is 204.

The original 4,429.71 square metres school was built in 1930. An addition (Gymnasium) of 590.7 square metres was built in 1972. A second addition (Link) of 105.0 square metres and Roof Observatory Classroom of 120.92 square metres were built in 2002. A standalone Annex of 594 square metres was built in 1955. Total building area is 5,840.33 square metres. The 1930 Original Building was modernized in 2002. Room No. Indicated in this report is based on the Alberta Infrastructure Plans. Annex which is currently used as a Daycare Centre was upgraded in 2000. The current student enrollment is 204.

ABC Group A Division 2 - School. The 1930 Original Building has three storeys; 1955 Annex, 1972 Addition and 2002 Addition are single storey. The 1930 Original Building has combustible and non-combustible construction and are sprinklered. The 1955 Annex and 1972 Addition have combustible and non-combustible construction and are unsprinklered.

New Link in 2002.

Structural Summary:

(1930) Original Building has load bearing brick masonry walls on footing, slab on grade; each floor and roof have concrete slab and concrete beams.

(1930) Original Building (Elevator Shaft) - has concrete and blocks and concrete wall from Basement to Roof Penthouse. (installed in 2002)

(1930) Original Building (Roof Observatory Classroom) has metal deck on OWSJ on steel beams on HSS columns on concrete pads; concrete topping on metal deck on metal angles and beams on concrete pads. (installed in 2002)

(1955) Annex has wood deck on OWSJ on load bearing concrete blocks, concrete slab on grade but does not have foundation information.

(1972) Addition (gymnasium) has precast double Tee concrete slab on precast concrete load bearing wall panels on grade beams on concrete piles; concrete slab on grade.

(2002) Link between 1930 and 1972 buildings has metal deck on metal channels on concrete columns on concrete grade beams on concrete piles.

Recommendations for future action: repair load bearing brick masonry walls; repair concrete blocks.

Overall structural system rating is 4 (acceptable).

Envelope Summary:

(1930) Original Building has SBS roofing; load bearing brick masonry walls, PVC windows; exterior wood doors and metal doors.

(1930) Original Building (Elevator penthouse) has SBS roofing; face brick walls. (installed in 2002)

(1930) Original Building (Roof Observatory Classroom) has SBS roofing; metal siding; PVC windows, metal doors. (installed in 2002)

(1955) Annex has SBS roofing, metal siding fascia, metal framed storefront, metal doors, PVC windows in wood opening casing.

(1972) Addition (Gymnasium) has SBS roofing, wood siding fascia, precast load bearing concrete wall panels, metal doors.

(2002) Link between 1930 and 1972 building has SBS roofing, concrete blocks, wood siding fascia, PVC windows, metal doors.

Recommendations for future action include: replace wood siding; repair wood window casing; replace joint caulking; replace prefinished perforated metal soffit; replace metal flashing.

Overall envelope system rating is acceptable

Interior Summary:

(1930) Original Building has brick masonry interior partitions; concrete slab ceiling and sheet vinyl flooring in Classrooms; drywall and terrazzo flooring in Corridors; carpet in Offices; drywall ceiling, ceramic wall tiles and sheet vinyl flooring in Washrooms; wood doors and metal frames; smart boards, whiteboards, tack boards, projection screens.

(1930) Original Building (Roof Observatory Classroom) has exposed metal deck and OWSJ; metal stud drywall, sheet vinyl flooring, metal doors, fire rated metal framed storefronts, whiteboards and tackboards. (installed in 2002)

(1955) Annex has concrete block walls, exposed wood deck ceiling and OWSJ, wood doors and metal frames; drywall ceiling and carpet in Office; drywall ceiling and sheet vinyl flooring in Washrooms; suspended T-bar ceiling and sheet vinyl flooring in Vestibules.

(1972) Addition has exposed concrete slab ceiling, acoustic ceiling panels, painted precast concrete wall panels in Gymnasium; plywood ceiling concrete block walls epoxy flooring in Washrooms and Showers; drywall ceiling and vinyl tiles in Storage; wood doors and metal frames.

(2002) Link between 1930 and 1972 buildings has drywall ceiling, rubber sheet flooring, metal frame storefront; wood door and metal frame.

(2002) Addition has interior gypsum board metal stud partitions between rooms and concrete blocks along Corridors; exposed acoustic metal deck and open web steel beams and vinyl tiles in Classrooms; carpet in Music Room; suspended T-bar ceiling and carpet in Meeting Room and Office; suspended T-bar ceiling and sheet vinyl flooring in Corridors; whiteboards, tackboards and projection screens in Classrooms; wood doors and metal frames.

Recommendations for future action include: ; install fire stopping materials to floor, wall and ceiling penetration holes; repair brick wall and repaint walls; repaint concrete floor; provide automatic entrance doors to Annex; remove and replace vinyl tiles; replace some metal lockers.

Overall interior system rating is 4 (acceptable).

Mechanical Summary:

Almost all of the mechanical system for the main school building was replaced in 2002; This heating system consists of two hot water boilers which feed the perimeter fin heating system, entrance force flows, unit heaters, and a glycol heat exchanger which feeds the supply air fan heating coil. Ventilation is provided through new ductwork from a main supply fan in the basement, which is then relieved to the top floor ceiling space to roof exhaust hoods. There is also a new rooftop unit for cooling the computer room on the second floor.

All plumbing fixture and trim are new, including water closets, urinals, sinks, and lavatories.

The main school building has a new sprinkler system with hose cabinets on each end of each floor.

The Gymnasium is heated and ventilated by 3 parallel duct furnaces and a supply fan. The lavatories and trim in the washrooms were replaced in the 2002 upgrade, but the toilets, urinals, and showers are existing. The shower spaces are currently being used as storage.

The 1955 annex has two furnaces to heat and ventilate the building, with some electrical force flows at the entrances, and some supplemental heaters in various areas. Plumbing fixtures are in good condition.

The overall mechanical system is in acceptable condition.

Electrical Summary:

The electrical systems for the entire facility were upgraded in 2002. Interior lighting is energy efficient. Fire Alarm System is of the addressable type. The school has been provided with a 600A, 120/208V, 3 phase, 4 wire service, obtained from a pad mounted transformer. Overall, the electrical systems are 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* (1930)

(1930) Original Building - has brick masonry foundation walls on concrete footing.

(1930) Original Building (Elevator Shaft) - has 200 mm concrete foundation wall on 400 mm thick concrete pad. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

A1010 Standard Foundations* (1955)

(1955) Addition Annex - no information on foundation.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

A1010 Standard Foundations* (1972)

(1972) Addition - has concrete grade beams on concrete piles.

RatingInstalledDesign LifeUpdated4 - Acceptable1972100MAR-10

A1010 Standard Foundations* (2002)

(2002) Link between 1930 and 1972 Buildings - has concrete grade beams on concrete piles.

RatingInstalledDesign LifeUpdated4 - Acceptable2002100MAR-10

A1030 Slab on Grade* (1930)

(1930) Original Building - has 125 mm concrete slab on grade.

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

A1030 Slab on Grade* (1955)

(1955) Addition Annex - has concrete slab on grade.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

A1030 Slab on Grade* (1972)

(1972) Addition - has concrete slab on grade.

RatingInstalledDesign LifeUpdated4 - Acceptable1972100MAR-10

A1030 Slab on Grade* (2002)

(2002) Link between 1930 and 1972 Buildings - has 200 mm concrete slab on 100 mm void form on grade.

RatingInstalledDesign LifeUpdated4 - Acceptable2002100MAR-10

A2020 Basement Walls (& Crawl Space)* (1930)

(1930) Original Building (Basement) - has face brick walls.

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

B1010.01 Floor Structural Frame (Building Frame)* (1930)

(1930) Original Building - has load bearing brick masonry walls and concrete floor slabs.

RatingInstalledDesign LifeUpdated3 - Marginal1930100MAR-10

Event: Repair brick walls. (approx. 10 square metres)

Concern:

(1930) Original Building (ELEC 029) - load bearing brick masonry walls have cracks.

(1930) Original Building (West Exit near Classroom 109) - has damaged face brick wall.

(1930) Original Building (exterior wall near Boiler Room 028) - has damaged brick wall.

Recommendation:

Repair brick walls. (approx. 10 square metres)

TypeYearCostPriorityRepair2011\$6,000Low



(1930) Original Building (ELEC 029) - load bearing brick masonry walls have cracks.

B1010.01 Floor Structural Frame (Building Frame)* (1955)

(1955) Addition Annex - has load bearing concrete block walls.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

B1010.01 Floor Structural Frame (Building Frame)* (1972)

(1972) Addition - has precast load bearing concrete wall panels.

RatingInstalledDesign LifeUpdated4 - Acceptable1972100MAR-10

B1010.01 Floor Structural Frame (Building Frame)* (2002)

(2002) Link between 1930 and 1972 Buildings - has metal deck on metal channels on concrete columns.

RatingInstalledDesign LifeUpdated4 - Acceptable2002100MAR-10

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* (1930)

(1930) Original Building (all floors) - has load bearing brick masonry walls.

(1930) Original Building (Elevator Shaft) - has concrete and blocks and concrete wall and concrete block wall from Basement to Roof Penthouse. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* (1955)

(1955) Addition Annex - has concrete blocks.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

B1010.02 Structural Interior Walls Supporting Floors (or Roof)* (1972)

(1972) Addition - has concrete blocks.

RatingInstalledDesign LifeUpdated4 - Acceptable1972100MAR-10

B1010.03 Floor Decks, Slabs, and Toppings* (1930)

(1930) Original Building (All Floors) - has concrete slabs.

(1930) Original Building (Observatory South Roof Deck 304) - has concrete slab on 38 x 235 mm wood joists, concrete roof beams. (installed in 2002)

(1930) Original Building (Observatory North Open Roof Deck 306) - has wood deck on 38 x 235 mm wood joists, concrete roof pads. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

B1010.03 Floor Decks, Slabs, and Toppings* (1955)

(1955) Addition Annex - has concrete slab.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

B1010.03 Floor Decks, Slabs, and Toppings* (1972)

(1972) Addition - has concrete slab.

RatingInstalledDesign LifeUpdated4 - Acceptable1972100MAR-10

B1010.05 Mezzanine Construction* (1972)

(1972) Addition Mezzanine (Mechanical Space 101; Mechanical Room 102) - has plywood on wood joists.

RatingInstalledDesign LifeUpdated4 - Acceptable1972100MAR-10

B1010.06 Ramps: Exterior*

(1955) Annex (West Exit) - has a concrete ramp. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200040MAR-10

B1010.07 Exterior Stairs*

(1930) Original Building (West Exits, North Entrance; East Main Entrance) - has concrete stairs.

RatingInstalledDesign LifeUpdated3 - Marginal193040MAR-10

Event: Repair face brick retaining walls. (2 stairs)

Concern:

(1930) Original Building (West Exits) - stairs have damaged face brick retaining walls.

Recommendation:

Repair face brick retaining walls. (2 stairs)

TypeYearCostPriorityRepair2011\$8,000Low

Updated: MAR-10

B1010.10 Floor Construction Firestopping*

(1930) Original Building (Boiler Room 028; Electrical Room 029, Janitor Room 033, Music Room 035; Jan 226) - has penetrations (conduit, pipe, raceway) through floors / walls / ceilings (1972) Addition - Conduit penetration form Gymnasium to Storage Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	MAR-10

Event: Fill and seal the floor/wall/ceiling penetrations with firestopping material.

Concern:

(1930) Original Building - unsealed penetrations, (conduit, pipe, raceway) through the floors, walls and ceilings compromise the buildings fire separations.

Recommendation:

Fill and seal the floor/wall/ceiling penetrations with firestopping material to meet code.

Consequences of Deferral:

Facility is not code compliant.

TypeYearCostPriorityCode Repair2011\$10,000High



(1930 Original Building (Jan 131) has holes in ceiling.

Updated: MAR-10

B1020.01 Roof Structural Frame* (1930, 1972, 2002)

(1930) Original Building (Central Pitched Roof) - has deck on metal beams and wood roof trusses.

(1930) Original Building (North and South Roof) - has concrete slab and concrete beams.

(1930) Original Building (Observatory) - has metal deck on open web steel joists

(1972) Addition - has precast double Tee roof concrete beams.

(2002) Link between 1930 and 1972 Buildings - has 38 mm metal deck on steel channels on concrete blocks and steel beams.

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-10

Event: Remove garbage from the attic.

Concern:

(1930) Original Building (Central Pitched Roof) - has garbage in the attic.

Recommendation:

Remove garbage from the attic.

TypeYearCostPriorityPreventative Maintenance2011\$5,000Low

Updated: MAR-10

B1020.01 Roof Structural Frame* (1955)

(1955) Addition Annex - wood deck on open web steel joists.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

B1020.04 Canopies*

(1930) Original Building (West Exits) - has canopies attached to exterior walls and suspended with cables, plywood deck on wood joists, SBS roofing, metal fascia and prefinished perforated metal soffit.

(1955) Annex (East Exit) - canopy is supported by a concrete block wall and a steel post and constructed with wood deck on wood joists, SBS roofing, horizontal metal siding fascia and prefinished perforated metal soffit.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

(1930) Original Building (exterior walls) - has face bricks.

(1930) Original Building (Chimney) - has face bricks.

(1930) Original Building (exterior walls of Central Portion above North and South roofs) - has face bricks.

(1930) Original Building (Elevator Penthouse) - has face bricks. (installed in 2002)

(2002) Link between 1930 and 1972 Buildings - has face bricks.

RatingInstalledDesign LifeUpdated3 - Marginal200275MAR-10

Event: Repair face bricks. (approx. 60 square metres)

Concern:

(1930) Original Building (Chimney) - face bricks lose.

Recommendation:

Repair face bricks. (approx. 60 square metres)

TypeYearCostPriorityFailure Replacement2011\$12,000Low

Updated: MAR-10

B2010.01.06.03 Metal Siding**

(1930) Original Building (Roof Science Observatory Room) - has metal siding. (installed in 2002)

(1955) Annex - has horizontal metal siding fascia. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace metal siding. (approx. 100 square metres)

TypeYearCostPriorityLifecycle Replacement2042\$15,000Unassigned

B2010.01.06.04 Wood Siding**

(1972) Addition - has horizontal wood siding fascia.

(2002) Link - has horizontal wood siding above exterior doors.

(Including 1972 because of small area)

RatingInstalledDesign LifeUpdated3 - Marginal200240MAR-10

Event: Replace wood siding. (approx. 100 square metres)

<u>(1972)</u>

Concern:

(1972) Addition - horizontal wood siding fascia has rotten.

Recommendation:

Replace wood siding. (approx. 100 square metres)

TypeYearCostPriorityFailure Replacement2011\$15,000Low

Updated: MAR-10

Event: Replace wood siding. (approx. 20 square metres)

(2002)

TypeYearCostPriorityLifecycle Replacement2042\$3,000Unassigned

Updated: MAR-10

B2010.01.09 Expansion Control: Exterior Wall Skin* (1972)

(1972) Addition - precast load bearing concrete wall panels have expansion control joints.

(2002) Link between 1930 and 1972 Buildings - has expansion control joints.

RatingInstalledDesign LifeUpdated4 - Acceptable197275MAR-10

B2010.01.11 Joint Sealers (caulking): Ext. Wall** (1972)

(1972) Addition - expansion control joints of precast load bearing concrete wall panels have caulking. (2002) Link between 1930 and 1972 Buildings - expansion control joints have caulking. (including 2002 link because of small area)

RatingInstalledDesign LifeUpdated3 - Marginal197220MAR-10

Event: Replace joint sealers (caulking). (approx. 18 linear

metres)

Concern:

(1972) Addition - expansion control joints of precast load bearing concrete wall panels have open gaps.

Recommendation:

Replace joint sealers (caulking). (approx. 18 linear metres)

TypeYearCostPriorityRepair2011\$1,000Low

Updated: MAR-10

Event: Replace joint sealers (caulking). (approx. 180 linear

metres)

TypeYearCostPriorityLifecycle Replacement2013\$54,000Unassigned

Updated: MAR-10

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

(1972) Addition - has stained horizontal wood siding fascia.

(1972) Addition - has painted precast load bearing concrete panels.

(2002) Link - has stained horizontal wood siding above exterior doors.

(including 2002 link because of small area)

RatingInstalledDesign LifeUpdated4 - Acceptable197215MAR-10

Event: Repair paints (& Stains): Exterior Wall. (approx.

120 square metres)

TypeYearCostPriorityLifecycle Replacement2013\$12,000Unassigned

Updated: MAR-10

B2010.01.99 Other Exterior Wall Skin* (Chain Link Fence)

(1930) Original Building (Roof Science Observatory Room) - open deck has 1200 mm high chain link fence. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

B2010.02.02 Precast Concrete: Ext. Wall Const.* (1972)

(1972) Addition - has precast load bearing concrete wall panels.

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

B2010.02.03 Masonry Units: Ext. Wall Const.* (1955)

(1955) Addition Annex - has load bearing concrete block walls.

RatingInstalledDesign LifeUpdated4 - Acceptable1955100MAR-10

B2010.02.03 Masonry Units: Ext. Wall Const.* (2002)

(2002) Link between 1930 and 1972 Buildings - has concrete blocks.

RatingInstalledDesign LifeUpdated3 - Marginal2002100MAR-10

Event: Replace concrete blocks. (approx. 5 square

<u>metres)</u>

Concern:

(2002) Link between 1930 and 1972 Buildings (east wall) - has damaged concrete blocks.

TypeYearCostPriorityRepair2011\$5,000Low

Updated: MAR-10

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

(1930) Original Building (Roof Science Observatory Room) - has metal studs. (installed in 2002)

Rating Installed Design Life Updated 4 - Acceptable 1930 100 MAR-10

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

(1930) Original Building (Roof Science Observatory Classroom Walls) - has 100 mm rigid insulation, air/vapour barrier membrane.

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

B2010.05 Parapets*

(1930) Original Building - has facing brick parapets and stone coping blocks.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

B2010.06 Exterior Louvers, Grilles, and Screens*

(1930) Original Building (Basement Fan Room 038; Boiler Room 028) - has metal louvres.

(1930) Original Building (Roof Science Observatory Room) - has metal louvres. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

B2010.09 Exterior Soffits*

(1930) Original Building (West Exit Canopies) - has prefinished perforated metal soffit.

(1955) Annex - has painted plywood soffit.

RatingInstalledDesign LifeUpdated3 - Marginal050MAR-10

Event: Repair canopies. (2 caopies)

Concern:

(1930) Original Building (West Exits) - canopies have damaged prefinished perforated metal soffit.

Recommendation:

Repair canopies. (2 caopies)

TypeYearCostPriorityRepair2011\$5,000Low

Updated: MAR-10

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows** (1930)

(1930) Original Building (Basement) - has vinyl windows c/w awnings and wire mesh screens. (approx. 22 windows) (installed in 2002)

(1930) Original Building (Main Floor) - has vinyl windows c/w awnings and wire mesh screens. (approx. 28 windows) (installed in 2002)

(1930) Original Building (Second Floor) - has vinyl windows c/w awnings and wire mesh screens. (approx. 35 windows) (installed in 2002)

(1930) Original Building (Roof Science Observatory Classroom 303) - has vinyl windows c/w awnings. (approx. 3 windows) (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace vinyl windows. (88 windows)

TypeYearCostPriorityLifecycle Replacement2042\$176,000Unassigned

Updated: MAR-10

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows** (1955)

(1955) Addition Annex - has vinyl windows inserted in the wood framed opening. Windows have awnings. (approx. 21 windows) (installed in 2000)

RatingInstalledDesign LifeUpdated3 - Marginal200040MAR-10

Event: Repair wood window sills. (21 sills)

Concern:

Wood window sills have rotten.

Recommendation:

Repair wood window sills. (21 sills)

TypeYearCostPriorityRepair2011\$10,500Low

Updated: MAR-10

Event: Replace vinyl windows. (21 windows)

TypeYearCostPriorityLifecycle Replacement2040\$42,000Unassigned

Updated: MAR-10

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows** (2002)

(2002) Link between 1930 and 1972 Buildings - has vinyl windows c/w awnings. (approx. 2 windows) (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace vinyl windows. (2 windows)

TypeYearCostPriorityLifecycle Replacement2042\$4,000Unassigned

Updated: MAR-10

B2030.01.02 Steel-Framed Storefronts: Doors** (1955)

(1955) Addition Annex - has metal framed storefront and door. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200030MAR-10

Event: Replace metal framed storefront and door. (1 door)

TypeYearCostPriorityLifecycle Replacement2030\$6,000Unassigned

Updated: MAR-10

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B2030.01.06 Automatic Entrance Doors**

(2002) Link between 1930 and 1972 building (West side)- has automatic entrance doors.

RatingInstalledDesign LifeUpdated4 - Acceptable200215MAR-10

Event: Replace automatic entrance doors. (2 doors)

TypeYearCostPriorityLifecycle Replacement2017\$20,000Unassigned

Updated: MAR-10

B2030.01.10 Wood Entrance Door**

(1930) Original Building (East Front Entrance) - has stained wood doors.

(1930) Original Building (North Entrance, West Exits) - has painted wood doors.

RatingInstalledDesign LifeUpdated4 - Acceptable193020MAR-10

Event: Replace wood entrance door. (11 doors)

TypeYearCostPriorityLifecycle Replacement2013\$22,000Unassigned

Updated: MAR-10

B2030.02 Exterior Utility Doors** (1930)

(1930) Original Building (Basement Boiler Room, Basement Exit) - has metal doors and metal frames. (2 doors) (installed in 2002)

(1930) Original Building (Attic to Roof) - has metal door and metal frame. (1 door) (installed in 2002)

(1930) Original Building (Roof Science Observatory Classroom 303) - has metal doors and metal frames. (2 doors) (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace exterior utility doors. (5 doors)

TypeYearCostPriorityLifecycle Replacement2042\$5,000Unassigned

B2030.02 Exterior Utility Doors** (1955)

(1955) Addition Annex (East and West Exits) - has metal doors and metal frames. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200040MAR-10

Event: Replace exterior utility doors. (2 doors)

TypeYearCostPriorityLifecycle Replacement2040\$2,000Unassigned

Updated: MAR-10

B2030.02 Exterior Utility Doors** (1972)

(1972) Addition - has metal doors and metal frames. (2 doors) (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace exterior utility doors. (2 doors)

TypeYearCostPriorityLifecycle Replacement2042\$2,000Unassigned

Updated: MAR-10

B2030.02 Exterior Utility Doors** (2002)

(2002) Link between 1930 and 1972 Buildings - has metal doors and metal frames. (4 doors)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace exterior utility doors. (4 doors)

TypeYearCostPriorityLifecycle Replacement2042\$4,000Unassigned

Updated: MAR-10

B3010.01 Deck Vapor Retarder and Insulation*

(1930) Original Building (Roof) - has rigid insulation. (installed in 2002)

(1930) Original Building (Observatory South roof deck) - has rigid insulation, batt insulation. (installed in 2002)

(1955) Addition Annex - has rigid insulation.

(1972) Addition - has rigid insulation.

(2002) Link between 1930 and 1972 Buildings - has rigid insualtion.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** (1930)

(1930) Original Building (whole roof) - has SBS roofing.

(1930) Original Building (Observatory South Roof Deck 304) - has SBS roofing on fibreboard on rigid insulation on 13 mm plywood sheathing on 38 x 89 wood furring on on 38 x 235 mm wood joists, batt insulation, concrete roof slab. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

Event: Replace SBS roofing. (approx. 1470 square metres)

TypeYearCostPriorityLifecycle Replacement2027\$294,000Unassigned

Updated: MAR-10

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** (1955)

(1955) Annex - has SBS roofing. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200125MAR-10

Event: Replace SBS roofing. (approx. 430 square metres)

TypeYearCostPriorityLifecycle Replacement2026\$86,000Unassigned

Updated: MAR-10

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** (1972)

(1972) Addition - has SBS roofing. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

Event: Replace SBS roofing. (approx. 590 square metres)

TypeYearCostPriorityLifecycle Replacement2027\$118,000Unassigned

Updated: MAR-10

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** (2002)

(2002) Link between 1930 and 1972 Buildings - has SBS roofing.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

Event: Replace SBS roofing. (approx. 100 square metres)

TypeYearCostPriorityLifecycle Replacement2027\$20,000Unassigned

Updated: MAR-10

B3010.08.02 Metal Gutters and Downspouts**

(1930) Original Building - has roof drains connecting to interior downspouts and to main sewer system.

(1930) Original Building (West Exit canopies) - has roof drains and exterior metal downspouts.

(1930) Original Building (Roof Science Observatory Room) - has roof drains entering the building, piping out through the lower level of exterior walls.

(1955) Annex - has roof drains connecting to interior downspouts and to main sewer system.

(1955) Annex (East Exit canopy) - has scuppers, exterior metal downspouts.

(1972) Addition - has scuppers, exterior metal downspouts.

(2002) Link between 1930 and 1972 Buildings - has roof drains entering the building, piping out through the lower level of exterior walls.

(including 1955, 1972, & 2002 link because of small areas)

RatingInstalledDesign LifeUpdated4 - Acceptable193030MAR-10

Event: Replace roof drains and downspouts. (approx. 200

linear metres)

TypeYearCostPriorityLifecycle Replacement2013\$6,000Unassigned

Updated: MAR-10

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

(1955) Annex (JAN 141)- has roof hatch c/w cat ladder.

(1972) Addition (Mezzanine - Mechanical Space 101) - has roof hatch c/w cat ladder.

RatingInstalledDesign LifeUpdated4 - Acceptable197225MAR-10

S3 INTERIOR

C1010.01 Interior Fixed Partitions* - Stud (2002)

(1930) Original Building (Roof science observatory room) - has metal stud partitions. (installed in 2002)

(1930) Original Building (new walls) - has metal stud partitions. (installed in 2002)

(2002) Link between 1930 and 1972 Buildings - has metal stud partitions.

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

C1010.01 Interior Fixed Partitions* - Unit Masonry Assemblies

(1930) Original Building - has brick masonry partitions.

(1955) Annex - has concrete block.

(1972) Addition - has concrete block.

Rating 0 Design Life Updated 0 MAR-10

Event: Repair concrete block walls. (approx. 5 square

metres)

Concern:

(1975) Addition (boys Change Room 006; Boys Washroom

007) - concrete block walls have cracks.

Recommendation:

Repair concrete block walls. (approx. 5 square metres)

TypeYearCostPriorityRepair2011\$5,000Low

Updated: MAR-10

C1010.05 Interior Windows*

(1955) Annex (Office 140, Playroom 135) - has metal framed windows c/w clear glazing panes. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200080MAR-10

C1010.06 Interior Glazed Partitions and Storefronts*

(1930) Original Building (Basement - Gallery 039; Music Room 035) - has pressed steel famed storefront c/w tempered glass. (installed in 2002)

(1930) Original Building (Main Floor - Principal 122; V. Principal 123; Counsellor 124) - has pressed steel famed storefront c/w tempered glass. (installed in 2002)

(1930) Original Building (Main Floor - Administration 119) - has wood famed storefront c/w tempered glass. (installed in 2002)

(1930) Original Building (Roof Science Observatory Room - Classroom 303) - has fire rated pressed steel famed storefront c/w wired glass. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200280MAR-10

C1010.07 Interior Partition Firestopping*

No apparent interior partition firestopping observed.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

C1020.01 Interior Swinging Doors (& Hardware)* (1930)

(1930) Original Building - has wood doors and metal frames. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

C1020.01 Interior Swinging Doors (& Hardware)* (1955)

(1955) Addition Annex (Playroom 135; Storage Room 136; Furnace Room 137; Washroom 138; Washroom 139; Office 140; Janitors Closet/Roof Access 141; Nap Room 142; Washroom 143; Kitchen 144; Playroom 145; Washroom 146; Playroom 147; Washroom 148) - has wood doors and metal frames. (installed in 2000) (1955) Addition Annex (between Playrooms 145 and 147) - has a dutch door. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200040MAR-10

C1020.01 Interior Swinging Doors (& Hardware)* (1972)

(1972) Addition (Girls Washroom 001; Girls Change Room 002; Girls Shower 003; Office 004; Janitors Closet 005; Boys Change Room 006; Boys Washroom 007; Boys Shower 008; Office 009; Gymnasium Equipment Storage 010; Gymnasium 011) - has wood doors and metal frames.

RatingInstalledDesign LifeUpdated3 - Marginal197240MAR-10

Event: Replace wood doors. (approx. 7 doors)

Concern:

(1972) Addition (Girls Change Room 002; Janitors Closet 005; Boys Change Room 006; Gymnasium Equipment Storage 010; Gymnasium 011) - has damaged wood doors.

Recommendation:

Replace wood doors. (approx. 7 doors)

TypeYearCostPriorityFailure Replacement2011\$7,000Low

Updated: MAR-10

C1020.03 Interior Fire Doors*

(1930) Original Building (Main Floor - Corridor to North and South Stairs, North Stair to Workroom 135) - has 45 minute fire rated metal doors and metal frames. (installed in 2002)

(1930) Original Building (Second Floor - Corridor to North and South Stairs; Storage Room 213; Roof Access Ladder 214; Storage Room 215) - has 45 minute fire rated metal doors and metal frames. (installed in 2002)

(1930) Original Building (Roof Science Observatory Vestibule to Stair; Washroom 302, Classroom 303) - has 45 minute fire rated metal doors and metal frames. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

C1020.05 Interior Large Doors*

(1930) Original Building (Second Floor - Office 205; Storage 233) - has large wood doors. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

C1020.07 Other Interior Doors*

(1972) Addition (Mezzanine - Mechanical Space 101; Mechanical Room 102) - has plywood access doors.

RatingInstalledDesign LifeUpdated3 - Marginal19720MAR-10

Event: Replace both plywood doors with ULC labeled hatch doors. (2 doors)

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Concern:

Access doors are both single sheet plywood doors.

Recommendation:

Install fire rated hatch doors.

TypeYearCostPriorityCode Repair2011\$5,000Medium



Plywood hatch from Storage Room 010 to Mechanical Room 102

C1030.01 Visual Display Boards**

(1930) Original Building - has 5 smart board, 39 whiteboards, 8 projection screens and 26 tackboards. (installed in 2002) (1930) Original Building (Roof Science Observatory Classroom 303) - has 1 whiteboard and 3 tackboards. (installed in 2002)

(1972) Addition - has 1 whiteboard.

RatingInstalledDesign LifeUpdated4 - Acceptable200220MAR-10

Event: Replace visual display boards. (78 boards)

TypeYearCostPriorityLifecycle Replacement2022\$78,000Unassigned

Updated: MAR-10

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

(1930) Original Building (Basement - Girls Washroom 030; Boys Washroom 031) - has 6 prefinished metal toilet partitions. (installed in 2002)

(1930) Original Building (Main Floor - Girls Washroom 117; Boys Washroom 118; Girls Washroom 132; Boys Washroom 133) - has 7 prefinished metal toilet partitions. (installed in 2002)

(1972) Addition (Girls Washroom 001; Boys Washroom 007; PEO 004, 009) - has 6 prefinished metal toilet partitions.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

Event: Replace fabricated

compartments(Toilets/Showers). (19 partitions)

TypeYearCostPriorityLifecycle Replacement2032\$19,000Unassigned

Updated: MAR-10

C1030.08 Interior Identifying Devices*

(1930) (1955) (1972) - All rooms have interior identifying devices.

Rating Installed Design Life Updated 4 - Acceptable 1972 20 MAR-10

C1030.10 Lockers**

(1930) Original Building (Basement - JAN 033) - has prefinished double tier metal lockers. (2 lockers)

(1972) Addition (PEO 004, 009) - has prefinished double tier metal lockers. (12 lockers)

RatingInstalledDesign LifeUpdated3 - Marginal197230MAR-10

Event: Replace lockers. (approx. 14 lockers)

Concern:

(1930) Original Building (Basement - JAN 033) - has old prefinished double tier metal lockers. (2 lockers) (1972) Addition (PEO 004, 009) - has outdated prefinished double tier metal lockers. (12 lockers)

TypeYearCostPriorityFailure Replacement2011\$7,000Low

Updated: MAR-10

C1030.10 Lockers** (2000)

(1955) Annex (North Main Entrance Vestibule; East Exit)- has prefinished double tier metal lockers. (26 lockers) (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200030MAR-10

Event: Replace lockers. (approx. 26 lockers)

TypeYearCostPriorityLifecycle Replacement2030\$26,000Unassigned

Updated: MAR-10

C1030.12 Storage Shelving*

(1930) Original Building (Basement - Storage 042, 037; Art Storage Room 041; Pantry 022) - has wood shelves.

(1930) Original Building (Basement - Storage 023) - has plastic shelves.

(1930) Original Building (Second Floor - Multipurpose Room 222; Storage 208) - has wood shelves.

(1930) Original Building (Second Floor - Professional Library 217) - has wood and metal shelves.

(1955) Annex (Storage 136) - has wood shelves.

RatingInstalledDesign LifeUpdated4 - Acceptable193030MAR-10

C1030.14 Toilet, Bath, and Laundry Accessories*

(1930) Original Building (Basement - Girls Washroom 030; Boys Washroom 031) - has toilet accessories. (installed in 2002)

(1930) Original Building (Main Floor - Girls Washroom 117; Boys Washroom 118; Girls Washroom 132; Boys Washroom 133) - has toilet accessories. (installed in 2002)

(1930) Original Building (Second Floor - Boys Washroom 227; Girls Washroom 228; Washroom 230) - has toilet accessories. (installed in 2002)

(1930) Original Building (Roof Science Observatory Washroom 302) - has toilet accessories. (installed in 2002)

(1955) Annex (Washrooms 138, 139, 143, 146, 148) - has toilet accessories. (installed in 2000)

(1972) Addition (Girls Washroom 001; Girls Shower 003; Boys Washroom 007; Boys Shower 008, PEO 004, 009) - has toilet and shower accessories.

RatingInstalledDesign LifeUpdated4 - Acceptable197220MAR-10

C1030.17 Other Fittings* - Boot Racks

(1930) Original Building (Main Floor - North Entrance Vestibule, West Exit Vestibules) - have metal boot racks.

(1930) Original Building (Second Floor - Corridor near Storage Room 233) - have metal boot racks.

RatingInstalledDesign LifeUpdated4 - Acceptable19300MAR-10

C1030.17 Other Fittings* - Coat Hooks

(1930) Original Building (Storage 025; Cloakrooms 110, 114, 116, 128, 130, 204, 207, 211, 221, 223, 25, 232) - has coat hooks.

RatingInstalledDesign LifeUpdated4 - Acceptable19300MAR-10

C2010 Stair Construction*

(1930) Original Building (North and South Stairs from Basement to Second Floor) - metal stairs.

(1930) Original Building (West Stairs from Main Floor to outside) - concrete stairs.

(1930) Original Building (East Main Entrance Vestibule) - concrete stair.

(1930) Original Building (Roof Science Observatory) - has metal stair c/w metal channel stringers,38 mm deep metal pans and risers filled with concrete. (installed in 2002)

(2002) Link between 1930 and 1972 Buildings - has concrete stair.

RatingInstalledDesign LifeUpdated4 - Acceptable2002100MAR-10

C2020.02 Terrazzo Stair Finishes*

(1930) Original Building (East Main Entrance Vestibule) - concrete stair has terrazzo floor finish.

(1930) Original Building (West Stairs from Main Floor to outside) - concrete stairs have terrazzo floor finish.

RatingInstalledDesign LifeUpdated4 - Acceptable193080MAR-10

C2020.05 Resilient Stair Finishes**

(1930) Original Building (North and South Stairs from Basement to Second Floor) - metal stairs have rubber tiles finish. (installed in 2002)

(1930) Original Building (West Stairs from Main Floor to outside) - concrete stairs have rubber tiles finish. (installed in 2002)

(2002) Link between 1930 and 1972 Buildings - concrete stair has rubber tiles finish.

RatingInstalledDesign LifeUpdated4 - Acceptable200220MAR-10

Event: Replace resilient stair finishes. (approx. 5 stairs)

TypeYearCostPriorityLifecycle Replacement2022\$25,000Unassigned

Updated: MAR-10

C2020.08 Stair Railings and Balustrades*

(1930) Original Building (North and South Stairs from Basement to Second Floor) - metal stairs have wood railing.

(1930) Original Building (West Stairs from Main Floor to outside) - concrete stairs have wood railing.

(1930) Original Building (East Main Entrance Vestibule) - concrete stair has wood railing.

(1930) Original Building (Roof Science Observatory) - metal stair has wood railing. (installed in 2002)

(2002) Link between 1930 and 1972 Buildings - concrete stair has wood railing.

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

C2030.01 Ramp Construction*

(1930) Original Building (Basement - Boiler Room 028) - has wood ramp.

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

C2030.02 Ramp Finishes*

(1930) Original Building (Boiler Room 028) - wood ramp has carpet.

RatingInstalledDesign LifeUpdated4 - Acceptable193030MAR-10

C2030.03 Ramp Railings*

(1930) Original Building (Boiler Room 028) - wood ramp has metal pipe railing.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

C3010.04 Gypsum Board Wall Finishes (Unpainted)*

(1972) Addition Mezzanine (Mechanical Space 101; Mechanical Room 102) - has unpainted gypsum board.

RatingInstalledDesign LifeUpdated4 - Acceptable197260MAR-10

C3010.06 Tile Wall Finishes**

(1930) Original Building (Basement - Girls Washroom 030; Boys Washroom 031) - has ceramic wall tiles. (installed in 2002)

(1930) Original Building (Main Floor - Girls Washroom 117; Boys Washroom 118; Girls Washroom 132; Boys Washroom 133) - has ceramic wall tiles. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace tile wall finishes. (approx. 60 square

metres)

TypeYearCostPriorityLifecycle Replacement2042\$9,000Unassigned

Updated: MAR-10

C3010.11 Interior Wall Painting*

(1930) Original Building - has interior wall painting on face brick walls. (repainted in 2002)

(1955) Annex - has interior wall painting concrete blocks. (repainted in 2000)

(1972) Addition - has interior wall painting on concrete blocks. (repainted in 2002)

RatingInstalledDesign LifeUpdated3 - Marginal200210MAR-10

Event: Repair walls and repaint walls. (approx. 120 square metres)

Concern:

(1930) Original Building (West Basement Walls in Office 034, Jan 033, Lunch 015, Storage 023) - paint has peeled off.

Recommendation:

Repair walls and repaint walls. (approx. 120 square metres)

TypeYearCostPriorityRepair2011\$12,000Low



(1930) Original Building (Office 034) - paint has peeled off.

C3020.01.01 Epoxy Concrete Floor Finishes*

(1972) Addition Main Floor (Girls Washroom 001; Girls Shower 003; Boys Washroom 007; Boys Shower 008) - has epoxy floor finishes.

RatingInstalledDesign LifeUpdated4 - Acceptable19720MAR-10

C3020.01.02 Paint Concrete Floor Finishes*

(1930) Original Building (Basement - Boiler Room 028; Electrical Room 029; Fan Room 038; Storage 036; North Stair Vestibule) - has painted concrete finishes.

RatingInstalledDesign LifeUpdated3 - Marginal200210MAR-10

Event: Repair floor and repaint concrete floor. (approx.

105 square metres)

Concern:

(1930) Original Building (Basement - Boiler Room 028) - paint of concrete finishes has faded and peeled off.

Recommendation:

Repair floor and repaint concrete floor. (approx. 105 square metres)

TypeYearCostPriorityRepair2011\$5,250Low

Updated: MAR-10

C3020.02 Tile Floor Finishes**

(1930) Original Building (Basement - Boys Washroom 031) - has mosaic floor tiles in front of urinals. (installed in 2002)

(1930) Original Building (Main Floor - Boys Washroom 118) - has mosaic floor tiles in front of urinals. (installed in 2002)

(1930) Original Building (Main Floor - Administration 119) - has quarry tiles. (installed in 2002)

(1930) Original Building (Second Floor - Library 212) - has quarry tiles. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200250MAR-10

Event: Replace tile floor finishes. (approx. 190 square

metres)

TypeYearCostPriorityLifecycle Replacement2052\$28,500Unassigned

Updated: MAR-10

C3020.03 Terrazzo Floor Finishes*

(1930) Original Building (Corridors) - has terrazzo floor finishes.

RatingInstalledDesign LifeUpdated4 - Acceptable193075MAR-10

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C3020.04 Wood Flooring** (1972)

(1972) Addition (Gymnasium 011) - has wood strip flooring. (reinstalled in 1990)

RatingInstalledDesign LifeUpdated4 - Acceptable199030MAR-10

Event: Replace wood flooring. (approx. 420 square

metres)

TypeYearCostPriorityLifecycle Replacement2020\$84,000Unassigned

Updated: MAR-10

C3020.07 Resilient Flooring** (1930)

(1930) Original Building (Basement - Lunch Area 015; Lunch Area 017; Vestibule 018; Vestibule 019; Elevator Mechanical Room 020; Kitchen 021; Pantry 022; Storage Room 023; Office 024; Storage Room 025; Police Office 026; Girls Washroom 030; Boys Washroom 031; Janitors Office 033; Office 034; Gallery Room 039; Art Room 040; Office 044; Storage Room 045) - has sheet vinyl flooring. (installed in 2002)

(1930) Original Building (Basement - Music Storage 037; Art Storage 041; Storage Room 042) - has vinyl tile flooring. (1930) Original Building (Main Floor - Classroom 109; Cloakroom 110; Classroom 111; Cloakroom 112; Classroom 113; Cloakroom 114; Classroom 115; Cloakroom 116; Girls Washroom 117; Boys Washroom 118; Classroom 127; Cloakroom 128; Classroom 129; Cloakroom 130; Janitors Closet 131; Girls Washroom 132; Boys Washroom 133; Work Room 135) - has sheet vinyl flooring. (installed in 2002)

(1930) Original Building (Second Floor - Classroom 203; Cloakroom 204; Office 205; Classroom 206; Cloakroom 207 Classroom 210; Cloakroom 211; Storage Room 213; Roof Access Ladder 214; Storage Room 215; Classroom 220; Cloakroom 221; Multipurpose Room 222; Cloakroom 223; Classroom 224; Cloakroom 225; Janitors Closet 226; Boys Washroom 227; Girls Washroom 228; Classroom 229; Washroom 230; Reading Room 231; Cloakroom 232; Storage Room 233) - has sheet vinyl flooring. (installed in 2002)

(1930) Original Building (Roof Science Observatory Storage Room 305) - has vinyl tiles. (installed in 2002)

(1930) Original Building (Roof Science Observatory Classroom 303, Washroom 302, Vestibule to Roof) - has sheet vinyl flooring. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200220MAR-10

Event: Replace resilient flooring. (approx. 1350 square

metres)

TypeYearCostPriorityLifecycle Replacement2022\$135,000Unassigned

C3020.07 Resilient Flooring** (1955)

((1955) Addition Annex (Playroom 135; Storage Room 136; Washroom 138; Washroom 139; Nap Room 142; Washroom 143; Kitchen 144; Playroom 145; Washroom 146; Playroom 147; Washroom 148; Corridors, North Main Entrance Vestibule; East Exit Vestibule) - has sheet vinyl flooring. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200020MAR-10

Event: Replace resilient flooring. (approx. 380 square

metres)

TypeYearCostPriorityLifecycle Replacement2020\$38,000Unassigned

Updated: MAR-10

C3020.07 Resilient Flooring** (1972)

(1972) Addition Main Floor (Girls Change Room 002; PEO 004; Janitors Closet 005; Boys Change Room 006; PEO 009; Gymnasium Equipment Storage 010) - has vinyl tile flooring.

RatingInstalledDesign LifeUpdated3 - Marginal197220MAR-10

Event: Replace resilient flooring. (approx. 115 square

metres)

Concern:

(1972) Addition Main Floor (Girls Change Room 002; PEO 004; Janitors Closet 005; Boys Change Room 006; PEO 009; Gymnasium Equipment Storage 010) - vinyl tile flooring has worn out and cracked.

Recommendation:

Replace resilient flooring. (approx. 115 square metres)

TypeYearCostPriorityFailure Replacement2011\$11,500Low

C3020.08 Carpet Flooring** (1930)

(1930) Original Building (Basement - Music Room 035) - has carpet flooring.

(1930) Original Building (Main Floor - Administration Office 119; INF 120; Open Space 121; Principal 122; V. Principal 123; Counsellor 124; Office 125; Meeting Room 126; Staff Room 134) - has carpet flooring.

(1930) Original Building (Second Floor - Computer Room 208; Server Room 209; Library 212; Stage 216; Professional Library 217; partial Classrooms 224, 229) - has carpet flooring.

RatingInstalledDesign LifeUpdated4 - Acceptable200215MAR-10

Event: Replace carpet flooring. (approx. 1520 square

metres)

TypeYearCostPriorityLifecycle Replacement2017\$152,000Unassigned

Updated: MAR-10

C3020.08 Carpet Flooring** (1955)

(1955) Annex (Office 140) - has carpet. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200015MAR-10

Event: Replace carpet flooring. (approx. 50 squaire

metres)

TypeYearCostPriorityLifecycle Replacement2015\$5,000Unassigned

Updated: MAR-10

C3030.01 Concrete Ceiling Finishes (Unpainted)*

(1930) Original Building (Basement - Boiler Room) - has unpainted concrete ceiling.

(1955) Annex (Jan 141; Furnace 137) - has unpainted concrete ceiling.

RatingInstalledDesign LifeUpdated4 - Acceptable1930100MAR-10

C3030.02 Ceiling Paneling (Wood)*

(1955) Annex - has painted wood deck ceiling.

RatingInstalledDesign LifeUpdated4 - Acceptable195560MAR-10

C3030.03 Plaster Ceiling Finishes (Unpainted)*

(1930) Original Building - painted plaster ceiling. (repainted in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200260MAR-10

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

(1930) Original Building (Basement -`Lunch Area 015; Lunch Area 017; KIT 021) - has suspended T-bar ceiling system c/w acoustic ceiling tiles. (installed in 2002)

(1930) Original Building (Main Floor - Washrooms 132, 133) - has suspended T-bar ceiling system c/w acoustic ceiling tiles. (installed in 2002)

(1955) Annex (North Main Entrance Vestibule, East Exit Vestibule; Washroom 134; Nap Room 142) - has suspended T-bar ceiling system c/w acoustic ceiling tiles. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

Event: Replace acoustic ceiling treatment (Susp.T-Bar).

(approx. 300 square metres)

TypeYearCostPriorityLifecycle Replacement2027\$15,000Unassigned

Updated: MAR-10

C3030.07 Interior Ceiling Painting*

(1930) Original Building (Basement - Girls Washrooms 030, Boys Washroom 031; partial Room 024; Corridors) - has painted drywall ceiling. (installed in 2002)

(1930) Original Building (Main Floor - Administration Office 119; INF 120; Open Space 121; Principal 122; V. Principal 123; Counsellor 124; Office 125; Classroom 127; Cloakroom 128; Classroom 129; Cloakroom 130; Staff 134; Work Room 135, Corridors) - has painted drywall ceiling. (installed in 2002)

(1930) Original Building (Roof Science Observatory Washroom 302) - has painted drywall ceiling. (installed in 2002)

(1955) Annex (Office 140; Washrooms 138, 139, 146, 148) - has painted drywall ceiling. (installed in 2000)

(1972) Addition - has painted exposed precast concrete Tee roof beams.

(2002) Link between 1930 and 1972 buildings has painted drywall ceiling.

RatingInstalledDesign LifeUpdated4 - Acceptable200020MAR-10

C3030.09 Other Ceiling Finishes* - Acoustic Ceiling Panel

(1972) Addition (Gymnasium 011) - has acoustic ceiling panels between precast concrete beams.

RatingInstalledDesign LifeUpdated4 - Acceptable19720MAR-10

C3030.09 Other Ceiling Finishes* - Plywood Ceiling

(1972) Addition (Girls Washroom 001; Girls Change Room 002; Girls Shower 003; Boys Change Room 006; Boys Washroom 007; Boys Shower 008) - has painted plywood ceiling.

RatingInstalledDesign LifeUpdated4 - Acceptable19720MAR-10

D1010.01.02 Hydraulic Passenger Elevators**

(1930) Original Building - has Central Elevator c/w egg crate ceiling, plastic laminated side wall panels, stainless steel wall panel at rear, sheet vinyl flooring; maximum capacity for 12 persons; maximum loading capacity of 1134 kg. It serves Basement, Main Floor, Second Floor and Observatory Floor. Basement Level has doors on both sides. (installed in 2002)

RatingInstalledDesign LifeUpdated3 - Marginal200230MAR-10

Event: Repair elevator door sensors for all levels.

Concern:

Elevator has entry motion sensor problem.

Recommendation:

Repair elevator door sensors for all levels.

Consequences of Deferral:

Health and safety issue.

TypeYearCostPriorityRepair2011\$6,000High

Updated: MAR-10

Event: Replace hydraulic passenger elevator. (1 car)

TypeYearCostPriorityLifecycle Replacement2032\$150,000Unassigned

S4 MECHANICAL

D2010.04 Sinks**

Stainless steel sinks and trim in 1930 building in every classroom and in 1955 building. A water fountain bubbler is installed on each classroom sink. Lunchroom kitchen sink also has dish sprayer. Molded stone janitor sinks.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace 30 sinks.

TypeYearCostPriorityLifecycle Replacement2032\$15,000Unassigned

Updated: MAR-10

D2010.05 Showers**

Showers are unused. Space in Gym is used as storage. Showers have push button metering valves and vandal proof heads.

RatingInstalledDesign LifeUpdated4 - Acceptable197230MAR-10

Event: Replace 13 showers.

TypeYearCostPriorityLifecycle Replacement2013\$40,000Unassigned

Updated: MAR-10

D2010.08 Drinking Fountains / Coolers**

Vitreous china water fountains installed in gym.

RatingInstalledDesign LifeUpdated4 - Acceptable197235MAR-10

Event: Replace 12 Drinking Fountains.

TypeYearCostPriorityLifecycle Replacement2013\$6,000Unassigned

Updated: MAR-10

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1972

Few remaining vitreous china lavatories located in gym locker rooms.

Rating Installed Design Life Updated 4 - Acceptable 1972 35 MAR-10

Event: Replace 2 WCs, 2 Lavs, 1 Urinal.

Priority Year Cost Lifecycle Replacement Unassigned 2013 \$7,500

Updated: MAR-10

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 2002

Mainly flush valve and flush tank water closets, Urinals with flush valves, stainless steel lavatories.

Installed Design Life Updated Rating 5 - Good MAR-10 2002 35

Event: Replace 15 WC's, 15 Lavs and 8 Urinals.

> **Priority** Cost Type Year Lifecycle Replacement 2037 \$75,000 Unassigned

D2020.01.01 Pipes and Tubes: Domestic Water* - 1955

The domestic hot water system in the 1955 building has a thermostatic mixing valve on it, presumably to limit the hot water to a set temperature.

RatingInstalledDesign LifeUpdated3 - Marginal195540MAR-10

Event: Re-pipe thermostatic mixing valve to serve only

student and staff washroom fixtures.

Concern:

Existing domestic hot water piping provides tempered hot water to Kitchen.

Recommendation:

Provide non-tempered domestic hot water service to Kitchen.

TypeYearCostPriorityFailure Replacement2011\$7,500High

Updated: MAR-10

Event: Study hot water requirements in building.

Concern:

The domestic hot water system has a thermostatic mixing valve on it, presumably to set the hot water at a low enough temperature to prevent the small children from scalding themselves. However, on site the cold water side to the mixing valve was shut off, possibly because some services, such as washing and cooking, require hot water.

Recommendation:

Study hot water requirements and safety concerns in building.

Consequences of Deferral:

Liability issues.

TypeYearCostPriorityStudy2011\$15,000High

Updated: MAR-10

D2020.01.01 Pipes and Tubes: Domestic Water* - 2002

Mainly insulated copper domestic water piping throughout school. Solder joints.

RatingInstalledDesign LifeUpdated5 - Good200240MAR-10

D2020.01.02 Valves: Domestic Water**

Valves on domestic water lines. Mainly isolation service..

RatingInstalledDesign LifeUpdated4 - Acceptable193040MAR-10

Event: Replace 80 Valves.

TypeYearCostPriorityLifecycle Replacement2013\$40,000Unassigned

Updated: MAR-10

D2020.01.03 Piping Specialties (Backflow Preventors)**

Backflow preventor installed in 1930 building on boiler make up water line.

RatingInstalledDesign LifeUpdated4 - Acceptable200220MAR-10

Event: Replace backflow preventor.

TypeYearCostPriorityLifecycle Replacement2022\$5,000Unassigned

Updated: MAR-10

D2020.02.06 Domestic Water Heaters** - 2002

Two Bradford White water heaters, model 50T653NH. Capacity 48 USgal. Input: 58,500 Btuh. c/w Grundfoss recirc pump - in basement of main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200220MAR-10

Event: Replace 2 Domestic Water Heaters.

TypeYearCostPriorityLifecycle Replacement2022\$15,000Unassigned

D2020.02.06 Domestic Water Heaters** - Annex

John Wood JWC 50204, 52,000 BTU/h, 36 gal. Rec. 41 gal. Tank in Annex

RatingInstalledDesign LifeUpdated4 - Acceptable199420MAR-10

Event: Replace Annex Domestic Water Heater.

TypeYearCostPriorityLifecycle Replacement2014\$4,000Unassigned

Updated: MAR-10

D2020.02.06 Domestic Water Heaters** - Gymnasium

A. O. Smith BT199-680, 179,800 BTU/h, 150 GPH rec. 80 gal.

RatingInstalledDesign LifeUpdated3 - Marginal198420MAR-10

Event: Replace Gymnasium domestic hot water heater.

Concern:

Hot water tanks are at the end of their life cycle.

Recommendation:

Replace hot water tanks in 1972 building.

Consequences of Deferral:

Tank failure.

TypeYearCostPriorityFailure Replacement2011\$10,000Low

Updated: MAR-10

D2020.03 Water Supply Insulation: Domestic*

(1955)(1972) Mainly preformed fiberglass pipe insulation. Canvas jacket in exposed areas.

RatingInstalledDesign LifeUpdated3 - Marginal195540MAR-10

Event: Repair domestic water piping insulation in

Gymnasium and Annex

Concern:

Some insulation missing on parts of the pipe and the insulation is in poor condition.

Recommendation:

Repair domestic water insulation in Gymnasium and Annex building

Consequences of Deferral:

High energy costs and shortened service life of domestic water heaters.

TypeYearCostPriorityRepair2011\$5,000Low

Updated: MAR-10

D2020.03 Water Supply Insulation: Domestic* - 2002

Mainly preformed fiberglass pipe insulation. Canvas jacket in exposed areas.

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

D2030.01 Waste and Vent Piping*

Waste and Vent Piping. Mainly cast iron & copper throughout school.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

D2030.02.04 Floor Drains*

Conventional, general purpose floor drains in Washrooms and in Mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

D2040.01 Rain Water Drainage Piping Systems*

Cast iron piping in all buildings.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

D2040.02.04 Roof Drains*

Conventional roof drains on flat roof areas. Dome strainers.

RatingInstalledDesign LifeUpdated4 - Acceptable193040MAR-10

D2090.15 Pool & Fountain Equipment**

Fountain installed in library of main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200220MAR-10

Event: Replace fountain.

TypeYearCostPriorityLifecycle Replacement2022\$10,000Unassigned

Updated: MAR-10

D3010.02 Gas Supply Systems*

Schedule 40 steel, gas distribution piping to heating boilers and domestic hot water heaters.

RatingInstalledDesign LifeUpdated4 - Acceptable193060MAR-10

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

Two Raypack model H3 4001 N 2P hot water boilers. 3,600,000 Buth input each. Installed in basement of main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200235MAR-10

Event: Replace 2 Heating Boilers and Accessories.

TypeYearCostPriorityLifecycle Replacement2037\$200,000Unassigned

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

Boiler chimney and combustion air duct recently installed in main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

Event: Replace main boiler Chimney &Comb. Air duct.

TypeYearCostPriorityLifecycle Replacement2032\$25,000Unassigned

Updated: MAR-10

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

Chemical pot feeder installed on main hydronic loop.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

D3020.03.01 Furnaces**

Two Lennox furnaces installed in Annex building.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

Event: Replace 2 Furnaces in Annex.

TypeYearCostPriorityLifecycle Replacement2027\$15,000Unassigned

Updated: MAR-10

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

Chimney and combustion air for each furnace, installed in Annex building.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

D3020.04.01 Fuel-Fired Duct Heaters**

Three in-line, Lennox gas fired duct heaters serve the gym.

RatingInstalledDesign LifeUpdated3 - Marginal197230MAR-10

Event: Replace 3 duct furnaces in gym.

Concern:

Duct furnaces and air system are near the end of their service

life, and are inefficient.

Recommendation:

Replace (3) furnaces with air handling unit.

Consequences of Deferral:

High energy usage and poor air quality.

TypeYearCostPriorityFailure Replacement2011\$60,000Low

Updated: MAR-10

D3020.06 Other Heat Generation Systems*

2002 - Electrical force flows at entrances of 1955 building.

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

D3040.01.01 Air Handling Units: Air Distribution** - Gymnasium

Lennox fan, connected to in-line duct furnaces.

RatingInstalledDesign LifeUpdated4 - Acceptable197230MAR-10

Event: Replace Gymnasium Air Handling Unit.

TypeYearCostPriorityLifecycle Replacement2013\$10,000Unassigned

D3040.01.01 Air Handling Units: Air Distribution** - Main School

Main school Air Handling Unit in Basement Mechanical room - consisting of centrifugal supply / return fans / mixing plenum / filters / coils.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

Event: Replace main school Air Handling Unit.

TypeYearCostPriorityLifecycle Replacement2032\$100,000Unassigned

Updated: MAR-10

D3040.01.04 Ducts: Air Distribution*

Low velocity supply air ductwork. Mainly overhead, throughout school. Ductwork connects Air Handling units to air outlets and inlets.

Balancing dampers installed.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

D3040.01.07 Air Outlets & Inlets:Air Distribution* - Gym & Annex

(1955)(1970) Grilles and diffusers installed in Gymnasium and Annex building.

RatingInstalledDesign LifeUpdated4 - Acceptable195530MAR-10

D3040.01.07 Air Outlets & Inlets:Air Distribution* - Main School

Supply diffusers and return grilles installed in main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

D3040.03.01 Hot Water Distribution Systems**

Hot water and glycol distribution system, including expansion tank and ITT plate & frame heat exchanger in main school building. Piping is mixture of copper and steel. Heating water distributed by base mounted, Bell & Gossett pumps.

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace main school Hot Water Distribution

<u>System</u>

TypeYearCostPriorityLifecycle Replacement2042\$650,000Unassigned

Updated: MAR-10

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D3040.04.01 Fans: Exhaust** - Annex

Washroom and kitchen exhaust fans in Annex building.

RatingInstalledDesign LifeUpdated4 - Acceptable200030MAR-10

Event: Replace 3 exhaust fans.

TypeYearCostPriorityLifecycle Replacement2030\$6,000Unassigned

Updated: MAR-10

D3040.04.01 Fans: Exhaust** - Gymnasium

Washroom exhaust system original and should be replaced in Gymnasium.

RatingInstalledDesign LifeUpdated3 - Marginal197230MAR-10

Event: Replace washroom exhaust fans.

Concern:

Washroom exhaust fans are at the end of their service life.

Recommendation:

Replace (2) washroom exhaust fans.

Consequences of Deferral:

Increasing failure rates and maintenance costs.

TypeYearCostPriorityFailure Replacement2011\$10,000Low

Updated: MAR-10

D3040.04.01 Fans: Exhaust** - Main School

Exhaust fans for kitchen, staff room, art room hood, janitor closets, and washrooms installed in main school building.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace 10 roof mounted Exhaust fans.

TypeYearCostPriorityLifecycle Replacement2032\$20,000Unassigned

Updated: MAR-10

D3040.04.03 Ducts: Exhaust*

Galvanized steel, low velocity - connecting exhaust grilles to roof mounted exhaust fans - all buildings.

RatingInstalledDesign LifeUpdated4 - Acceptable193050MAR-10

D3040.04.05 Air Outlets and Inlets: Exhaust* - Gymnasium & Annex

(1955)(1972) Exhaust inlets and outlets in Gymnasium & Annex building.

RatingInstalledDesign LifeUpdated4 - Acceptable195530MAR-10

D3040.04.05 Air Outlets and Inlets: Exhaust* - main school

Various sidewall & ceiling exhaust grilles / registers, ducted to exhaust fans. Mostly egg crate type grilles.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

D3040.05 Heat Exchangers**

Water to glycol plate heat exchanger installed in mechanical room of main school building.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace Plate & Frame Heat Exchanger.

TypeYearCostPriorityLifecycle Replacement2032\$10,000Unassigned

Updated: MAR-10

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

Packaged rooftop unit (Carrier) for computer room installed on roof of main school building.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace packaged rooftop unit.

TypeYearCostPriorityLifecycle Replacement2032\$30,000Unassigned

D3050.02 Air Coils**

Glycol heating coil installed in suction side of supply fan in main school building.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace glycol heating coil.

TypeYearCostPriorityLifecycle Replacement2032\$7,500Unassigned

Updated: MAR-10

D3050.05.02 Fan Coil Units**

Force flow units installed at entrance ways in main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

Event: Replace 4 Fan Coil Units.

TypeYearCostPriorityLifecycle Replacement2032\$20,000Unassigned

Updated: MAR-10

D3050.05.03 Finned Tube Radiation**

Fin tube radiation installed around perimeter of the building on every floor.

RatingInstalledDesign LifeUpdated4 - Acceptable200240MAR-10

Event: Replace 75 m of Finned Tube Radiation.

TypeYearCostPriorityLifecycle Replacement2042\$75,000Unassigned

Updated: MAR-10

D3050.05.06 Unit Heaters**

Unit heater installed in boiler room in main school building.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace 2 unit heaters.

TypeYearCostPriorityLifecycle Replacement2032\$5,000Unassigned

Updated: MAR-10

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D3060.02.01 Electric and Electronic Controls** - 2002

Line voltage controls for entrance way force flow units, unit heaters and exhaust fans in main school building.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace Electric Controls in main school building.

TypeYearCostPriorityLifecycle Replacement2032\$10,000Unassigned

Updated: MAR-10

D3060.02.01 Electric and Electronic Controls** - Annex

Electronic controls for furnaces and exhaust fans.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

Event: Replace Electric Controls for Annex building.

TypeYearCostPriorityLifecycle Replacement2032\$5,000Unassigned

Updated: MAR-10

D3060.02.01 Electric and Electronic Controls** - Gymnasium

Electric controls for duct furnaces and fans.

RatingInstalledDesign LifeUpdated4 - Acceptable197230MAR-10

Event: Replace Electric Controls for Gymnasium heating

systems.

TypeYearCostPriorityLifecycle Replacement2013\$5,000Unassigned

D3060.02.02 Pneumatic Controls**

Pneumatic compressor - Quincy duplex Air compressor c/w Hankisson refrigerated air dryer. Pneumatic valves for perimeter fin and reheat coils. Pneumatic motors for dampers in air handling units.

RatingInstalledDesign LifeUpdated5 - Good200240MAR-10

Event: Replace Heating and Vent system controls.

TypeYearCostPriorityLifecycle Replacement2042\$50,000Unassigned

Updated: MAR-10

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

DDC Control system installed in main school building. Combination electronic with pneumatics for field devices.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

Event: Replace Building Systems Controls (BMCS,

EMCS).

TypeYearCostPriorityLifecycle Replacement2027\$100,000Unassigned

Updated: MAR-10

D4010 Sprinklers: Fire Protection*

Building fully sprinklered with concealed, recessed heads. Each floor has zone alarm.

RatingInstalledDesign LifeUpdated5 - Good200260MAR-10

D4030.01 Fire Extinguisher, Cabinets and Accessories* - Annex

Mostly ABC dry chemical Fire extinguishers in Annex. Regularly checked.

RatingInstalledDesign LifeUpdated4 - Acceptable195530MAR-10

D4030.01 Fire Extinguisher, Cabinets and Accessories* - Main School Building

Hose cabinets and ABC dry chemical fire extinguishers are located on each floor at each end of the main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

S5 ELECTRICAL

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

FPL main distribution centre has been provided and is located in the electrical room in the basement. It is fed from a pad mounted transformer located on the west side of the building. The distribution centre is rated at 600A, 120/208V, 3 phase, 4 wire and is complete with a 600A main breaker and a feeder breaker section. All feeder breakers are identified and spare breaker capacity is available.

RatingInstalledDesign LifeUpdated5 - Good199740MAR-10

Event: Replace Main Electrical Switchboards (Main

Distribution)

TypeYearCostPriorityLifecycle Replacement2037\$120,000Unassigned

Updated: MAR-10

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

1996 - 120/208 volt - 3 phase - 4 wire branch circuit panels throughout school. Spaces and capacity adequate. Approximately 10 panels have been provided.

RatingInstalledDesign LifeUpdated5 - Good199730MAR-10

Event: Replace Electrical Branch Circuit Panelboards

(Secondary Distribution).

TypeYearCostPriorityLifecycle Replacement2027\$35,000Unassigned

Updated: MAR-10

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

2002 - Motor Control Centers are Square D.

RatingInstalledDesign LifeUpdated5 - Good200230MAR-10

Event: Replace motor control centers. Basis of estimate:

3 sections.

TypeYearCostPriorityLifecycle Replacement2032\$32,005Unassigned

Updated: MAR-10

D5010.07.02 Motor Starters and Accessories**

Motor control is provided by starters mounted in a motor control centre, (MCC). The MCC is the product of Square "D" and is located in the boiler room. The starters are complete with pilot lights and hand-off-auto selector switches.

Installed Design Life Updated Rating 5 - Good 2002 30 MAR-10

Replace Motor Starters and Accessories. Event:

> **Priority** Type Year Cost Lifecycle Replacement 2032 \$15,000 Unassigned

Updated: MAR-10

D5020.01 Electrical Branch Wiring*

All wiring is copper and in conduit.

Design Life Rating Installed Updated 6 - Excellent 2002 50 MAR-10

D5020.02.01 Lighting Accessories (Lighting Controls)*

Lighting is controlled by a low voltage switching system. Each area is locally switched.

Rating Installed Design Life Updated 5 - Good 2002 30 MAR-10

D5020.02.02.02 Interior Florescent Fixtures**

Fluorescent lighting has been provided throughout the school. Fixtures are either of the suspended, recessed or surface mounted type depending on the ceiling system. Fixtures are complete with T8 lamps and electronic ballasts.

Rating Installed Design Life Updated 6 - Excellent 2002 30 MAR-10

Event: Replace Interior Florescent Fixtures. Basis od

Estimate: Building Area

Priority Type Cost Year Lifecycle Replacement Unassigned 2032 \$300,000

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency lighting is provided by battery packs and remote heads located throughout the school. All points and paths of egress are adequately covered.

RatingInstalledDesign LifeUpdated6 - Excellent200220MAR-10

Event: Replace approx 24 Emergency Lighting Battery

Packs

TypeYearCostPriorityLifecycle Replacement2022\$12,000Unassigned

Updated: MAR-10

D5020.02.03.03 Exit Signs*

Powered exit signs, utilizing LED lamps have been provided at each required exit.

RatingInstalledDesign LifeUpdated6 - Excellent200230MAR-10

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Exterior wall packs at entrances and around building perimeter have been provided.

RatingInstalledDesign LifeUpdated4 - Acceptable200230MAR-10

D5030.01 Detection and Fire Alarm**

A Notifier AFP-200 addressable fire alarm system has been provided complete with heat and smoke detectors, pull stations, and bell-strobe units. The main is panel located in main office with a remote annunciator panel located at North exit. System is annually tested and externally monitored.

RatingInstalledDesign LifeUpdated6 - Excellent200225MAR-10

Event: Replace Detection and Fire Alarm System

TypeYearCostPriorityLifecycle Replacement2027\$75,000Unassigned

D5030.02.02 Intrusion Detection**

A Magna Alert intrusion alarm system has been provided. The system is complete with motion sensors, door contacts and key pads. The system is externally monitored.

RatingInstalledDesign LifeUpdated6 - Excellent200225MAR-10

Event: Replace Intrusion Detection System

TypeYearCostPriorityLifecycle Replacement2027\$55,000Unassigned

Updated: MAR-10

D5030.04.01 Telephone Systems*

Norstar Meridian System has been provided. Head-end equipment located in the basement electrical room.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

D5030.04.03 Call Systems**

Call system is Bogen Multicomm 2000, with the head end equipment located in the electrical room. Each classroom has been provided with a telephone and a speaker. Corridors have been provided with ceiling mounted speakers. The system has been interfaced with the telephone system.

RatingInstalledDesign LifeUpdated5 - Good200225MAR-10

Event: Lifecycle Replacement Call Systems

TypeYearCostPriorityLifecycle Replacement2027\$45,000Unassigned

Updated: MAR-10

D5030.04.04 Data Systems*

The school has been provided with a structured data cable system. Cables are of the Cat 5e type. Cables run in a mix of conduit and open wiring methods. Data outlets have been provided in each classroom and in the administration area.

RatingInstalledDesign LifeUpdated5 - Good200215MAR-10

D5030.04.05 Local Area Network Systems*

The main network is located in the electrical room and is compete with a rack containing patch panels and hubs and switches.

RatingInstalledDesign LifeUpdated5 - Good200215MAR-10

D5030.06 Television Systems*

Cable TV service has been provided to the school. Each classroom has been provided with a TV outlet.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	2002	20	MAR-10

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment*

(1930) Original Building (Second Floor - Library 212) - has tables, chairs, computer stations, magazine racks, wood book shelves and metal shelves. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-10

E1090.04 Residential Equipment*

(1930) Original Building (Basement - KIT 021) - has fridge, stoves, dishwasher, cooler. (installed in 2002)

(1930) Original Building (Basement - Pantry 022; Storage 025; JAN 033; Office 044) - has fridges. (installed in 2002)

(1930) Original Building (Basement - Storage 023) - has freezer. (installed in 2002)

(1930) Original Building (Basement - Lunch 015) - has microwave. (installed in 2002)

(1930) Original Building (Basement - Boiler Room 028) - has washer. (installed in 2002)

(1930) Original Building (Main Floor- Staff 134) - has fridge, stoves, dishwasher, microwaves. (installed in 2002)

(1930) Original Building (Second Floor - Storage 223) - has fridge, oven. (installed in 2002)

(1955) Annex (Kitchen 144) - has stove, fridges. (installed in 2000)

(1955) Annex (Corridor) - has freezer, fridge. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable200210MAR-10

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

(1972) Addition (Gymnasium 011) - has 6 wall mounted basketball backboards, scoreboard.

RatingInstalledDesign LifeUpdated4 - Acceptable197215MAR-10

E2010.02 Fixed Casework** - Millwork

(1930) Original Building (Classrooms) - has millwork. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200235MAR-10

Event: Replace fixed casework. (approx. 120 linear

metres)

TypeYearCostPriorityLifecycle Replacement2037\$120,000Unassigned

E2010.02 Fixed Casework** - Reception Counters

(1930) Original Building (Office 024; Administration 119; Library 212) - has reception counters. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200235MAR-10

Event: Replace reception counters. (approx. 18 linear

metres)

TypeYearCostPriorityLifecycle Replacement2037\$18,000Unassigned

Updated: MAR-10

E2010.02 Fixed Casework** - Vanities

(1930) Original Building (Basement - Girls Washroom 030; Boys Washroom 031) - has plastic laminated vanities. (installed in 2002)

(1930) Original Building (Main Floor - Girls Washroom 117; Boys Washroom 118; Girls Washroom 132; Boys Washroom 133) - has plastic laminated vanities. (installed in 2002)

(1930) Original Building (Second Floor - Boys Washroom 227; Girls Washroom 228; Washroom 230) - has plastic laminated vanities. (installed in 2002)

(1930) Original Building (Roof Science Observatory Washroom 302) - has plastic laminated vanity. (installed in 2002)

(1972) Addition (Girls Washroom 001; Boys Washroom 007; PEO 004, 009) - has plastic laminated vanities.

RatingInstalledDesign LifeUpdated3 - Marginal200235MAR-10

Event: Replace vanities. (approx. 10 linear metres)

TypeYearCostPriorityLifecycle Replacement2037\$10,000Unassigned

Updated: MAR-10

Event: Replace vanities. (approx. 4 linear metres)

Concern:

(1972) Addition (Girls Washroom 001; Boys Washroom 007; PEO 004, 009) - plastic laminated vanities have worn out.

Recommendation:

Replace vanities. (approx. 4 linear metres)

TypeYearCostPriorityFailure Replacement2011\$5,000Low

E2010.03.01 Blinds**

(1930) Original Building - has roll up blinds over windows. (88 blinds) (installed in 2002)

(1955) Annex - has venetian blinds over windows and East Exit door. (21 blinds) (installed in 2000)

RatingInstalledDesign LifeUpdated3 - Marginal200030MAR-10

Event: Repair blinds. (approx. 3 blinds)

Concern:

(1955) Annex - has damaged venetian blinds over some

windows and East Exit door

Recommendation:

Repair blinds. (approx. 3 blinds)

TypeYearCostPriorityRepair2011\$1,200Low

Updated: MAR-10

Event: Replace blinds. (approx. 105 blinds)

TypeYearCostPriorityLifecycle Replacement2030\$42,000Unassigned

Updated: MAR-10

E2010.05 Fixed Multiple Seating**

(1930) Original Building (Basement Music Room 035; Second Floor Stage 216) has wood tiered seating platforms. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable200235MAR-10

Event: Replac wood platforms. (approx. 100 square

metres)

TypeYearCostPriorityLifecycle Replacement2037\$10,000Unassigned

Updated: MAR-10

E2020.02.01 Portable Partitions, Screens and Panels*

(1930) Original Building (Basement - Office 044) - has movable partitions. (installed in 2002)

(1930) Original Building (Main Floor- Administration 119) - has movable partitions. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

F1010.03 Other Special Structures* - Open Wood Deck

(1930) Original Building (Roof Science Observatory Room North Open Roof Deck 306) - has wood deck on wood joists on wood posts on concrete pads.

RatingInstalledDesign LifeUpdated3 - Marginal20020MAR-10

Event: Seal exposed natural wood.

Concern:

Wood deck has untreated wood connections and ends.

Recommendation:

Seal exposed natural wood as appropriate (eg. stain,

perservation, paint)

TypeYearCostPriorityPreventative Maintenance2011\$5,000Medium

Updated: MAR-10

F1020.03 Other Integrated Construction* - Arts Room

(1930) Original Building (Basement - Arts Room) - has electric kiln, exhaust hood.

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

F1020.03 Other Integrated Construction* - Fish Pond

(1930) Original Building (Second Floor - Library 212) - has a fish pond. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

F1020.03 Other Integrated Construction* - Roof Science Observatory Room

(1930) Original Building - Roof Science Observatory Room. (installed in 2002)

- Roof has SBS on fibreboard on rigid insulation on 76 mm metal deck on OWSJ on steel beams on HSS columns.
- Classroom Walls have prefinished metal base sheet, 13 mm plywood sheathing, 100 mm rigid insulation c/w Z bars, air/vapour barrier membrane, 10 mm wood sheathing, 152 mm metal studs, 13 mm gypsum board.
- Observatory Walls have prefinished metal base sheet, 10 mm plywood sheathing, 152 mm metal studs, 10 mm plywood, metal liner.
- Classroom Floor has 100 mm concrete topping on 76 mm metal deck on metal angles and beams on concrete footing on original building concrete roof.
- Observatory South Roof Deck 304 has painted concrete flooring.
- Observatory North Open Roof Deck 306 has wood deck on wood joists on wood posts on concrete pads.
- Classroom Ceiling has exposed metal deck and OWSJ.
- Observatory Ceiling has prefinished perforated metal soffit.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	2002	0	MAR-10

F2020.01 Asbestos*

A Hazardous Materials management Project for Asbestos Building Material Survey Report was completed for Edmonton Public Schools by PHH Environmental Limited on October 29, 2001. Report indicated asbestos sheet flooring underneath carpet and mechanical pipe insulation, mechanical pipe elbow insulation and duct joint tape.

RatingInstalledDesign LifeUpdated4 - Acceptable19300MAR-10

F2020.02 PCBs*

No PCBs are known or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19300MAR-10

F2020.04 Mould*

No known mould has been observed.

RatingInstalledDesign LifeUpdated4 - Acceptable19300MAR-10

F2020.09 Other Hazardous Materials*

No other hazardous materials have been observed.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1930	0	MAR-10

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

(2002) Link between 1930 and 1972 building (West side) - has automatic entrance doors. Handicap stalls located in parking lot closest to 1955 Annex Building.

RatingInstalledDesign LifeUpdated3 - Marginal19300MAR-10

Event: Allow a driveway access directly to front of barrier

free doors.

Concern:

Handicap stalls located in parking lot closest to 1955 Annex

Building but far from 2007 Link barrier free entrance.

Recommendation:

Allow a driveway access directly to front of barrier free doors.

TypeYearCostPriorityBarrier Free Access Upgrade 2011\$10,000Low

Updated: MAR-10

K4010.02 Barrier Free Entrances*

(1955) Addition Annex - does not have automatic entrance doors.

(2002) Link between 1930 and 1972 building (West side) - has automatic entrance doors.

RatingInstalledDesign LifeUpdated3 - Marginal20020MAR-10

Event: Provide automatic entrance door. (2 doors)

Concern:

(1955) Addition Annex - does not have automatic entrance

doors.

Recommendation:

Provide automatic entrance door. (2 doors)

TypeYearCostPriorityBarrier Free Access Upgrade 2011\$20,000Low

K4010.03 Barrier Free Interior Circulation*

(1930) Original Building - Corridors are wide enough for wheelchairs.

(1930) Original Building - has an elevator to serve all floors. (installed in 2002)

RatingInstalledDesign LifeUpdated4 - Acceptable19300MAR-10

K4010.04 Barrier Free Washrooms*

(1930) Original Building (Basement - Girls Washroom 030; Boys Washroom 031) - has handicap washroom. (installed in 2002)

(1930) Original Building (Main Floor - Girls Washroom 117; Boys Washroom 118; Girls Washroom 132; Boys Washroom 133) - has handicap washroom. (installed in 2002)

(1930) Original Building (Roof Science Observatory Classroom 303) - has handicap washroom. (installed in 2002)

(1955) Annex (Washroom 143) - has handicap washroom. (installed in 2000)

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-10

K4020 Building Code

ABC Group A Division 2 - School. The 1930 Original Building has three storeys; 1955 Annex, 1972 Addition and 2002 Addition are single storey. The 1930 Original Building has combustible and non-combustible construction and are sprinklered. The 1955 Annex and 1972 Addition have combustible and non-combustible construction and are unsprinklered.

Rating	Installed	Design Life	Updated
4 - Acceptable	1930	0	MAR-10