

# RECAPP Facility Evaluation Report

Calgary School District #19



**Rideau Park Elementary / Junior High School**

B2758A

Calgary

<b>Facility Details</b>	
<b>Building Name:</b>	Rideau Park Elementary / Ju
<b>Address:</b>	829 Rideau Road S. W.
<b>Location:</b>	Calgary
<b>Building Id:</b>	B2758A
<b>Gross Area (sq. m):</b>	4,011.60
<b>Replacement Cost:</b>	\$10,756,704
<b>Construction Year:</b>	1930

<b>Evaluation Details</b>	
<b>Evaluation Company:</b>	Golder Associates Ltd.
<b>Evaluation Date:</b>	November 2 2010
<b>Evaluator Name:</b>	Meaghen Derksen

<b>Total Maintenance Events Next 5 years:</b>	<b>\$2,387,900</b>
<b>5 year Facility Condition Index (FCI):</b>	<b>22.20%</b>

**General Summary:**

Rideau Park Elementary and Junior High is a K-9 school with an enrollment of 464 students in the 2010-2011 school year.

The original two and a half storey 3360.7 m2 building (ie., lowest level is not fully above ground level) was constructed in 1930.

A one-storey 650.9 m2 addition was constructed northeast of the original building in 1962.

A one-storey 52.7 m2 addition was constructed as a second floor above the washrooms, P.E. Offices, foyer and gym storage in 1972.

A 12.1 m2, one-storey mechanical room was constructed on the south end of the original building in 1976.

The current gross building area is reported to be approximately 4077 m2.

Renovations to various areas of the building were completed in 1962, 1970, 1986, 1993, 2006, and 2007.

**Structural Summary:**

Structural drawings were not available for review. The building is constructed of cast-in-place ("CIP") concrete foundations supporting CIP concrete floors and masonry block walls.

The building structure is generally in good condition overall.

**Envelope Summary:**

Exterior walls are primarily clad in brick veneer.

The exterior windows, both fixed and operable, were upgraded to vinyl clad windows in 2000.

The exterior doors are painted wood in wood frames.

All roof assemblies were replaced in 1983 and consist of conventional asphalt and gravel built-up roof ("BUR") assemblies.

The building envelope is generally in acceptable overall condition.

**Interior Summary:**

The interior flooring consists of terrazzo and ceramic tile in the student washrooms on the lower level; sheet vinyl and vinyl tile in the majority of the classrooms and corridors; and carpet in the Library and offices. Painted and unpainted concrete floors are present in the mechanical rooms and storage closets throughout.

The gymnasium and stage have wood strip flooring.

Interior walls consist mainly of painted gypsum, painted concrete and masonry units. Other interior walls consist of wood paneling, and unpainted concrete.

Ceiling finishes are mainly painted gypsum or hardboard ceiling tiles glued to gypsum. The corridors and music room have suspended T-bar ceilings with laid-in acoustic tiles.

Interior finishes are generally in acceptable condition overall.

**Mechanical Summary:**

Domestic water distribution is copper and waste water piping (storm and sanitary) is a combination of cast iron, galvanized steel and ABS.

Domestic hot water heating is provided by a "State" 75 gallon natural gas fired hot water heater.

Heating is provided by two "Rite" natural gas fired steam boilers (1800 MBTU ea.) and associated equipment (condensate tank) located in the boiler room supplying perimeter finned tube radiation, fan coil units, unit ventilators, unit heaters and air handling units.

Ventilation is provided via the aforementioned unit ventilators and air handling units in combination with exhaust fans.

Fire protection is provided by standpipes and fire hoses located in corridors in the 1930 Section of the school.

The mechanical systems are generally in acceptable overall condition.

**Electrical Summary:**

The electrical supply is fed underground from a utility-owned pad mounted 300 kVa transformer with buried conductors leading to the main electrical panel. The main electrical switch gear and central distribution panel are original Federal Pioneer models rated at 120/208 volt, 800 amp, 3-phase, 4-wire service. The building is equipped with branch circuit panelboards throughout and the distribution wiring is copper.

Interior lighting throughout the building is fluorescent T-8 fixtures with electronic ballasts. Exterior lighting is high pressure sodium controlled by time clock. Exit lighting is by incandescent fixtures and emergency lighting is provided by a central battery bank with remote heads throughout.

The fire protection system is a Simplex fire alarm system. Intrusion alarming is provided by a Silent Knight/Regency keyed alarm system with exterior door contacts and motion detectors.

Receptacles in several rooms are <1m from service sinks and not ground fault protected. There is significant hazardous use of extension cords and power bars throughout the school due to a lack of power receptacles. Code upgrades are recommended within the timeframe of this report.

The electrical system is generally in acceptable overall 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\*

Cast in place ("CIP") reinforced concrete foundation walls, and spread footings support the building structures throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

### A1030 Slab on Grade\*

CIP concrete floor slabs on grade are present in the lower levels throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

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

CIP reinforced concrete walls and concrete masonry units (CMU).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

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

Original building consists of suspended CIP reinforced concrete floors. The wood floor of the stage has tongue & groove (T&G) wood decks on wood strapping or joists bearing on concrete slabs on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

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

CIP reinforced concrete walls and load-bearing CMU throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

### B1010.03 Floor Decks, Slabs, and Toppings\* - 1930 Section

Suspended reinforced CIP concrete slabs present in the 1930 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

### B1010.03 Floor Decks, Slabs, and Toppings\* - 1976 Addition

Concrete topping on steel deck in 1976 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1976	0	MAR-11

**B1010.07 Exterior Stairs\***

CIP concrete steps at the west entrance of the 1930 Section and the 1962 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**Event: Provide Handrail**

**Concern:**

No handrail provided at the main entrance stairs.

**Recommendation:**

Provide a code compliant handrail.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2011	\$1,500	Medium

**Updated:** MAR-11

**B1010.09 Floor Construction Fireproofing\***

Sprayed fireproofing on ceiling in Boiler Room.  
Non-combustible construction elsewhere.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**B1010.10 Floor Construction Firestopping\***

Fire stop present in majority of floor penetrations from mechanical and electrical rooms throughout.  
Fire stop sealant at some floor penetrations is absent, (installation of ULC-approved fire stop in penetrations < \$1000).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**B1020.01 Roof Structural Frame\***

The 1962 Addition roof structure have precast concrete panels supported on heavy timber beams.  
The 1976 Addition has steel decking supported on steel beams and joists.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	MAR-11

**B1020.04 Canopies\***

Wood framed canopies over the 1962 Addition east emergency exit doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1962	0	MAR-11

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

Concealed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11

**B1020.07 Roof Construction Firestopping\***

Concealed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11

## S2 ENVELOPE

### B2010.01.02.01 Brick Masonry: Ext. Wall Skin\*

Brick cladding on exterior throughout the 1930 Section and the 1962 and 1972 Additions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

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

Polyurethane joint sealers are present around exterior windows, doors, and expansion joints throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	MAR-11

#### Event: Replace Exterior Joint Sealant (~755 m)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$22,600	Unassigned

**Updated:** MAR-11

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

Painted accent band on exterior of the 1962 Addition.  
 Painted wood framed canopies on east side of the 1962 Addition.  
 Painted exterior CMU on the 1976 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2006	15	MAR-11

#### Event: Repaint Exteriors (~116 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$2,800	Unassigned

**Updated:** MAR-11

**B2010.01.13 Paints (& Stains): Exterior Wall\*\* - 1930 Section**

Painted precast accent parapet on the original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1930	15	MAR-11

**Event: Repaint Parapet (~38 m2)**

**Concern:**

Significant peeling and deterioration of paint on roof parapet.

**Recommendation:**

Repaint roof parapet.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$1,200	Medium

**Updated:** MAR-11

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

Exposed masonry block wall construction on 1976 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1976	0	MAR-11

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

Concealed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11

**B2010.05 Parapets\***

Precast concrete roof parapets around perimeter of original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1930	0	MAR-11

**Event: Replace Sections of Precast Parapet**

**Concern:**

Sections of precast coping are loose, cracked or have fallen off.

**Recommendation:**

Replace and/or repair sections of precast that are loose, cracked, or have fallen off.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2011	\$2,500	Medium

**Updated:** MAR-11



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

Air intake louvers and vents on exterior of the mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**B2010.09 Exterior Soffits\***

Painted concrete and/or wood framing on exterior canopies and recessed doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

**B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows\*\***

Vinyl clad sealed double pane windows throughout. Combination of operable and fixed units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	40	MAR-11

**Event: Replace Vinyl Windows (~132 m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$135,100	Unassigned

**Updated:** MAR-11

**B2030.01.10 Wood Entrance Door\*\***

Painted wood entrance doors throughout. Main entrance doors have glass inserts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1930	30	MAR-11

**Event: Replace Entrance Doors (2 units)**

**Concern:**

Main entrance doors do not fully close without force and jam on frame and threshold.

**Recommendation:**

Replace west entrance doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$3,900	Low

**Updated:** MAR-11

**Event: Replace Wood Entrance Doors (~10 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$19,300	Unassigned

**Updated:** MAR-11

**B2030.02 Exterior Utility Doors\*\***

Painted wood utility doors provided for emergency egress.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	40	MAR-11

**Event: Replace Wood Utility Doors (~2 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$1,800	Unassigned

**Updated:** MAR-11

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

Concealed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	MAR-11

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

All roof sections have conventional asphalt and gravel built-up roof (BUR) assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1983	25	MAR-11

**Event: Replace BUR Roofing (~1631 m2)**

**Concern:**

Felt lifting and significant amounts of asphalt exposed. Localized membrane blisters and ridging throughout. Debris and vegetation present.

**Recommendation:**

Replace BUR assemblies throughout.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$224,900	Medium

**Updated:** MAR-11

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

Two roof access hatches with internal metal access ladders, roof vents, roof drains, and mechanical curbs.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	1983	0	MAR-11

**Event: Repair Access Ladders (2) and Safety Railing**

**Concern:**

Access ladders to roof are too close to the walls and do not extend the appropriate length above the hatch.

Safety railing at the 1962 Addition roof hatch is loose and poses a safety hazard.

**Recommendation:**

Extend roof access ladders to the appropriate height within the roof hatch curb.

Extend wall anchors to allow proper foot placement on the upper rungs.

Tighten loose safety railing.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Repair	2011	\$2,500	Low

**Updated:** MAR-11

### S3 INTERIOR

#### C1010.01 Interior Fixed Partitions\*

Painted concrete, masonry block, and stud frame partitions with gypsum wall board between most offices, classrooms, and trade storage areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

#### C1010.03 Interior Operable Folding Panel Partitions\*\*

Folding partitions divide classrooms 115 & 116, 209 & 210, and 216 & 217 in the 1930 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	30	MAR-11

#### Event: Replace Folding Partitions (~45 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$61,900	Unassigned

**Updated:** MAR-11

#### C1010.05 Interior Windows\*

Single-pane windows in metal frames are present at the administration office, library office, and the classroom corridor walls throughout the 1930 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1930	0	MAR-11

#### C1010.06 Interior Glazed Partitions and Storefronts\*

Interior glazed partitions are present at vestibules at the southeast entrance of the 1930 Section and the west entrance of the 1962 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

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

Fire sealant provided around penetrations through partitions in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11

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

Hollow core wood doors with painted wood frames. Lever-type handsets on the majority of classroom doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

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

Original wood or wood and metal doors in main stairwells, boiler room and mechanical rooms throughout original building.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	1930	0	MAR-11

**Event: Install Corridor Doors (~6 units)**

**Concern:**

Fire rated door assemblies not provided at the stairwells on the main floor and the north stairwell on the second floor of the 1930 Section.

**Recommendation:**

Install ULC-approved and stamped fire rated door assemblies at stairwell locations.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Repair	2011	\$12,000	Low

**Updated:** MAR-11

**Event: Install Door Hold open Devices (~6 units)**

**Concern:**

Fire doors on lower floor stairwells and in the 1962 Addition are being held open with door stops or hooks.

**Recommendation:**

Install electrically supervised door hold open devices on corridor fire doors.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Repair	2011	\$21,000	Low

**Updated:** MAR-11

**Event: Upgrade Doors to Fire Rated Assemblies (~11 units)**

**Concern:**

Fire doors at the boiler room, basement storage areas, and in stairwells at corridors are not rated or tagged as being rated to ULC/CSA standards.

**Recommendation:**

Replace with ULC-approved and stamped fire rated door assemblies.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Code Upgrade	2011	\$10,000	Low

**Updated:** MAR-11

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

SMART boards are provided in some classrooms.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	2008	20	MAR-11

**Event: Replace SMART Boards (~5 units)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2028	\$37,500	Unassigned

**Updated:** MAR-11

**C1030.01 Visual Display Boards\*\* - Tack & White Boards**

Wood framed cork boards and white boards in classrooms, and library throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	20	MAR-11

**Event: Replace Tack Boards (~65 units)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$44,700	Unassigned

**Updated:** MAR-11

**Event: Replace White Boards (~43 units)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$63,400	Unassigned

**Updated:** MAR-11

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

Prefinished metal toilet compartments in student washrooms.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1983	30	MAR-11

**Event: Replace Toilet Compartments (~12 stalls)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$16,000	Unassigned

**Updated:** MAR-11

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

Classroom numbers and name plates, interior signage, wall mounted emergency egress plans etc. throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1983	0	MAR-11

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

Prefinished metal lockers in corridors on the lower floor and upper floors, and in student changerooms throughout. Combination of full-height, half height, and tote lockers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	30	MAR-11

**Event: Replace Lockers (~223 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$136,300	Unassigned

**Updated:** MAR-11

**C1030.12 Storage Shelving\***

A variety of painted and stained wood storage shelves throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

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

Mirrors, liquid soap dispensers, waste baskets, and paper towel and toilet paper dispensers in all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	MAR-11

**C2010 Stair Construction\***

CIP concrete stairs to lower floor, Boiler Room, and second floor. Wood framed stairs at front of stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**C2020.01 Tile Stair Finishes\***

With the exception of the stairs to the Boiler Room, Quarry tile finish is present on runs and risers on all stairs in the 1930 Section.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	1930	0	MAR-11

**Event: Replace Quarry Tile (~25 m2)**

**Concern:**

Quarry tile on stairs has significant deterioration.

**Recommendation:**

Replace quarry tile flooring in stairwells.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Failure Replacement	2011	\$8,000	Medium

**Updated:** MAR-11

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

Hardened rubber floor finish on stairs to Home Economics room, Music room, and Art room.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1992	20	MAR-11

**Event: Replace Rubber Stair Finish (~3 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$1,000	Unassigned

**Updated:** MAR-11

**C2020.08 Stair Railings and Balustrades\***

Painted metal pipe railing on stairs to boiler room and in stairwells throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

**C3010.02 Wall Paneling\*\***

Wood paneling on the stage walls.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	30	MAR-11

**Event: Replace Wood Paneling (~48 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$4,400	Unassigned

**Updated:** MAR-11



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

Ceramic tile on walls around urinals in the student washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	40	MAR-11

**Event: Replace Ceramic Wall Tile (~2 m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$1,000	Unassigned

**Updated:** MAR-11

**C3010.09 Acoustical Wall Treatment\*\* - Fabric**

Fabric acoustic wall panels are present in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	20	MAR-11

**Event: Replace Acoustic Panels (~110 m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$24,400	Unassigned

**Updated:** MAR-11

**C3010.09 Acoustical Wall Treatment\*\* - Pegboard**

Painted acoustic peg board present on the north wall in Room 121.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	20	MAR-11

**Event: Replace Acoustic Peg Board (~7 m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$1,600	Unassigned

**Updated:** MAR-11

**C3010.11 Interior Wall Painting\***

Painted concrete walls, CMU, gypsum board, and wood paneling throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	0	MAR-11

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

Ceramic floor tile present around the urinals in the student washrooms, in the foyer and student washrooms of the 1962 Addition, in the student changerooms, and in the gym storage room.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	50	MAR-11

**Event: Replace Ceramic Floor Tile (~137 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$24,100	Unassigned

**Updated:** MAR-11

**C3020.03 Terrazzo Floor Finishes\***

Terrazzo floor finishes present in the student washrooms on the lower floor.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

**C3020.04 Wood Flooring\*\***

Strip wood flooring in the gymnasium and stage.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	30	MAR-11

**Event: Replace Sports Floor (~372 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$96,600	Unassigned

**Updated:** MAR-11

**Event: Replace Stage Floor (~77 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$15,900	Unassigned

**Updated:** MAR-11

**C3020.07 Resilient Flooring\*\* - Sheet Vinyl**

Sheet vinyl flooring present in the Music Room, Art Room, Home Economics room, and classrooms 120, 201, 207.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	20	MAR-11

**Event: Replace Sheet Vinyl Flooring (~794 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$67,100	Unassigned

**Updated:** MAR-11

**C3020.07 Resilient Flooring\*\* - Vinyl Tile**

Original vinyl tile present in the corridors, custodian rooms, Science room, and in classrooms 15, and 15A in the 1930 Section.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	1930	20	MAR-11

**Event: Replace Vinyl Tile Flooring (~732 m2)**

**Concern:**

Vinyl tile is cracking and deteriorated. Showing signs that it has passed or exceeded end of life.

**Recommendation:**

Replace original vinyl tile.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Failure Replacement	2011	\$39,000	Low

**Updated:** MAR-11

**C3020.07 Resilient Flooring\*\* - Vinyl Tile (1986)**

Vinyl tile present in the Industrial Arts room and Classroom 19.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1986	20	MAR-11

**Event: Replace Vinyl Tile Flooring (~223 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$11,900	Unassigned

**Updated:** MAR-11

**C3020.08 Carpet Flooring\*\***

Carpet flooring is present in the Library, administration offices, and the majority of the classrooms throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1970	15	MAR-11

**Event: Replace Carpet Flooring (~971 m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$66,300	Unassigned

**Updated:** MAR-11

**Event: Upgrade to Vinyl Tile in Classrooms (~668 m2)**

**Concern:**

Carpet in high traffic areas is soiled and worn, and requires frequent cleaning and repairs.

**Recommendation:**

Upgrade carpet in classrooms to vinyl tile.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2011	\$35,600	Medium

**Updated:** MAR-11

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

Suspended T-bar ceilings with laid-in acoustic tile provided in corridors, the Music Room, and classroom 007.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	25	MAR-11

**Event: Replace Acoustic Ceiling Tile (~316 m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$14,700	Unassigned

**Updated:** MAR-11

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

Original fibreboard ceiling tile glued to gypsum ceilings in the Library, administration offices, Home Economics room and Art Room.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	25	MAR-11

**Event: Replace Acoustic Ceiling Tile (~527 m2)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$24,400	Unassigned

**Updated:** MAR-11

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

Painted gypsum board ceilings typical in classrooms, storage rooms and Boiler Room throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	0	0	MAR-11

## S4 MECHANICAL

### D2010.04 Sinks\*\* - Enamel Steel Service Sinks

Wall and counter mounted enamel steel service sinks and janitor sinks located in service rooms and class rooms throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

**Event:** Replace Enamel Steel Service Sinks (~8 ea.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$9,900	Unassigned

**Updated:** MAR-11

### D2010.04 Sinks\*\* - Stainless Steel Service Sinks

Assorted single, double and trough style stainless steel service sinks in staff and educational spaces throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1990	30	MAR-11

**Event:** Install Sediment Traps (5 ea.)

**Concern:**

The service sinks in the Industrial Arts ("IA") Shop and the main floor classrooms do not have sediment traps. Observation of the use of these sinks indicates that waste water disposed of at these sinks includes solids.

**Recommendation:**

Install sediment traps on aforementioned classroom service sinks.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2011	\$3,800	Low

**Updated:** MAR-11

**Event:** Replace Service Sinks (~8 ea.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$13,900	Unassigned

**Updated:** MAR-11

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

One original fibreglass shower is located in a staff washroom adjacent to the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

**Event: Replace Shower (1 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$2,800	Unassigned

**Updated:** MAR-11

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

Vitreous china non-refrigerated water fountains located throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1990	35	MAR-11

**Event: Replace Drinking Fountains (~6 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$9,900	Unassigned

**Updated:** MAR-11

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

14 enamel steel lavatories.  
 1 vitreous china lavatory in the basement facility operations room.  
 1 flush tank toilet.  
 18 flush valve toilets.  
 3 dump tank urinals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	35	MAR-11

**Event: Install Manual or Proximity Sensor Flush Valves on Urinals (~ 3 ea.)**

**Concern:**

Urinals run on continuous flush and refill cycles.

**Recommendation:**

Install manual or proximity sensor flush valves on urinals for water conservation.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2011	\$1,100	Low

**Updated:** MAR-11

**Event: Replace 15 Lavatories, 19 Toilets, and 3 Urinals**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$64,100	Unassigned

**Updated:** MAR-11

**D2020.01.01 Pipes and Tubes: Domestic Water\***

Black iron water main with copper distribution piping throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

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

Isolation valves on domestic water distribution throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	40	MAR-11

**Event: Replace Domestic Water Valves (~30 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$35,300	Unassigned

**Updated:** MAR-11



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

There are backflow prevention devices on the main domestic water supply, standpipe system, irrigation system, emergency water supply and boiler supply.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1993	20	MAR-11

**Event: Replace Backflow Preventors (~5 ea.)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$18,200	Unassigned

**Updated:** MAR-11

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

Recirculation pump on the domestic hot water supply line.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1995	20	MAR-11

**Event: Replace Domestic Water Pump (1 ea.)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2015	\$3,500	Unassigned

**Updated:** MAR-11

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

Domestic hot water heating is provided by a "State" 75 gallon natural gas fired water heater.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1995	20	MAR-11

**Event: Replace Domestic Water Heater (1 ea.)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2015	\$3,300	Unassigned

**Updated:** MAR-11

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

Waste and vent piping is generally cast iron and ABS.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

**D2030.03 Waste Piping Equipment\***

There is one sump pump located in a pit in the 1930 Section Boiler Room which provides service for three sinks on the main floor and serves as a floor drain for the Boiler Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

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

Roof drains with interior rain water drain to the municipal storm sewer system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**D2040.02.04 Roof Drains\***

Roof drains with aluminum strainers and internal rain water leaders.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	MAR-11

**D3010.02 Gas Supply Systems\***

The natural gas supply enters the building at grade on the west side of the building. Natural gas lines to the boilers and domestic hot water tank.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**D3020.01.01 Heating Boilers & Accessories: Steam\*\***

Two "Rite" natural gas fired steam boilers (1800 MBTU ea.) and associated equipment (condensate tank) provides the necessary low pressure steam for the heating systems throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	35	MAR-11

**Event: Replace Steam Boilers (2 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$1,344,200	Unassigned

**Updated:** MAR-11

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

The boilers' metal breaching is connected to an insulated metal stack.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	35	MAR-11

**Event: Replace Metal Breaching (~50 m)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$32,900	Unassigned

**Updated:** MAR-11

**D3020.01.04 Water Treatment: Steam Boilers\***

Water for the steam boiler is chemically treated at the condensate tank by a manual chemical feed pot and micron filter and water softener.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	0	MAR-11

**D3020.04.03 Fuel-Fired Unit Heaters\*\***

Natural gas fired unit heater located in the 1976 Addition mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-11

**Event: Replace Unit Heaters (2 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$3,500	Unassigned

**Updated:** MAR-11

**D3040.01.01 Air Handling Units: Air Distribution\*\***

The 1930 Section is ventilated by an air handling unit (AHU) with steam heating coil that was added in the 1976 Addition. The gymnasium in the 1962 Addition is ventilated by the original dedicated "Trane" AHU with steam heating coil located in a service room adjacent to the gymnasium stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-11

**Event: Replace Air Handling Units (2 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$104,700	Unassigned

**Updated:** MAR-11

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

The wood work shop has a separate dust collection system, located on the south side of the building. Both AHUs use standard disposable cellulose fibre filters changed quarterly and as required.

Filter packs were observed to be dirty or missing at the time of the evaluation survey. Replacement of filters is required (<\$1000).

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

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

The duct system includes all components related to the air distribution systems in the building. The air distribution system includes ducting for fresh air, return air, supply air, and exhaust air. Exhaust air ducting includes general building exhausts as well as local exhausts. The duct system includes ductwork, dampers, diffusers and other related components.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	1930	0	MAR-11

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

The air outlets and inlets are of varying types and include air diffusers, dampers and grilles.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

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

Heating distribution is through original cast iron piping and booster pumps to unit ventilators, finned tubed radiation units, unit heaters and air handling units throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	40	MAR-11

**Event: Replace Steam Distribution System, Complete with Insulation (~4077 m2/gfa)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$379,200	Unassigned

**Updated:** MAR-11

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

Rooftop axial exhaust fans provide local exhaust for the gymnasium, washrooms, specialty rooms and service spaces throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	30	MAR-11

**Event: Replace Exhaust Fans (4 ea.)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2014	\$73,400	Unassigned

**Updated:** MAR-11

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

Concealed.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

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

Eggcrate and prefinished metal grilled louvers throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	0	0	MAR-11

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

Steam to steam heat exchanger located on the main steam supply piping in the boiler room.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	30	MAR-11

**Event: Replace Heat Exchanger (1 unit)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2030	\$14,900	Unassigned

**Updated:** MAR-11

**D3050.01.04 Unit Air Conditioners\*\***

Roof top air conditioning unit provided for the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1972	30	MAR-11

**Event: Replace Roof Top Air Conditioning Unit (1 unit)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$34,500	Unassigned

**Updated:** MAR-11

**D3050.02 Air Coils\*\***

Low pressure steam heating air coils are provided in the aforementioned AHUs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-11

**Event: Replace Air Coils (2 Ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$13,200	Unassigned

**Updated:** MAR-11

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

Building entrances have Trane fan coil units. One ceiling mounted fan coil unit located in the Industrial Arts (I.A.) Shop. The 1976 Addition mechanical room has a ceiling-hung steam heated fan coil unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

**Event: Replace Fan Coil Units (~6 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$32,500	Unassigned

**Updated:** MAR-11

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

Steam finned tube radiation units are original and installed throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	40	MAR-11

**Event: Replace Finned Tube Radiation (~4077 m2/gfa)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$189,800	Unassigned

**Updated:** MAR-11

**D3050.05.07 Unit Ventilators\*\***

Steam unit ventilators provide heat and ventilation at the basement level of the 1930 Section in one classroom, the computer room and the server closet.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	30	MAR-11

**Event: Replace Unit Ventilators (5 units)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$45,900	Unassigned

**Updated:** MAR-11

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

Original pneumatic controls with individual thermostats in classrooms and administrative spaces throughout. New Quincy air compressor and DeViblis air dryer. A BMCS automation system was in the process of being installed at the time of the evaluation survey.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1930	40	MAR-11

**Event: Remove Pneumatic Controls (1 unit)**

**Concern:**

A fully automated BMCS was in the process of being installed at the time of the evaluation survey.

**Recommendation:**

Remove the pneumatic system following completion and balancing of the BMCS.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$8,500	Low

**Updated:** MAR-11

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

Installation of the BMCS automation system was in progress at the time of the evaluation survey.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2010	20	MAR-11

**Event: Replace BMCS (~4077 m2/gfa)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$84,800	Unassigned

**Updated:** MAR-11

**D4020 Standpipes\***

The building is equipped with a standpipe system complete with fire hoses.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11

**Event: Install Hoses in Wall Cabinets (5 units)**

**Concern:**

Fire hose reels are exposed and accessible to tampering and vandalism.

**Recommendation:**

Provide hoses in lockable cabinets.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2011	\$17,500	Medium

**Updated:** MAR-11

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

Fire extinguishers are wall mounted in corridors and service rooms throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	0	MAR-11



## S5 ELECTRICAL

### D5010.01 Main Electrical Transformers\*\*

Primary electrical service is by a utility-owned pad mounted 300 kVa transformer with buried conductors leading to the main electrical panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-11

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

The main electrical switch gear and central distribution panel are original Federal Pioneer and rated at 120/208 volt, 800 amp, 3-phase, 4-wire service for the main building power and is located in the 1976 Addition mechanical room. The original Federal Pioneer central distribution panel in the 1930 Section is at capacity and now serves as a sub-panel of the main system with a 250 amp disconnect.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-11

#### Event: Replace Main Electrical Switchboards (1 ea.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$45,600	Unassigned

**Updated:** MAR-11

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

24 to 42 circuits per panelboards located throughout the school. Most are at or near capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1972	30	MAR-11

**Event: Install New Circuit Panels (2 units)**

**Concern:**

Permanent use of extension cords throughout most educational spaces in the 1930 Section, including being suspended from equipment and the ceiling as well as "daisy-chains" of extensions cords is causing tripping and shock hazards. The installation of more power outlets will require more circuit panels to provide the necessary service.

**Recommendation:**

Provide a new circuit panel in the basement level and second floor level of the 1930 Section (also refer to D5020.01).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2011	\$9,800	High

**Updated:** MAR-11

**Event: Replace Electrical Branch Circuit Panelboards (~12 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$58,500	Unassigned

**Updated:** MAR-11

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

Allen Bradley motor starters for supply and return fans and pumps. Motor starters are located in mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1960	30	MAR-11

**Event: Replace Motor Starters (~10 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$15,000	Unassigned

**Updated:** MAR-11

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

Electrical branch wiring is standard copper in rigid conduit with flexible connectors at end devices, as needed.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1960	0	MAR-11

**Event: Install Additional Duplex Receptacles (~60 ea.)**

**Concern:**

Permanent use of extension cords throughout most educational spaces in the 1930 Section including being suspended from equipment and the ceiling as well as "daisy-chains" of extensions cords is causing tripping and shock hazards.

**Recommendation:**

Add ~3 new duplex receptacles to each classroom (also refer to D5010.05).

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Program Functional Upgrade	2011	\$9,000	Medium

**Updated:** MAR-11

**Event: Install GFI-Protected Receptacles (~4 ea.)**

**Concern:**

Duplex outlets in the Staff Room, Industrial Arts Shop, and two classrooms each have a receptacle <1 m from sinks which are not ground fault protected.

**Recommendation:**

Replace standard receptacles with ground fault protected (GFI) receptacles.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Code Upgrade	2011	\$2,000	Medium

**Updated:** MAR-11

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

Lighting in the school is generally controlled by line voltage keyed and toggle switches.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1930	0	MAR-11

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

Interior lighting is fluorescent fixtures with electronic ballasts throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	30	MAR-11

**Event: Replace Fluorescent Light Fixtures (~4077 m2/gfa)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2038	\$355,900	Unassigned

**Updated:** MAR-11

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

Emergency lighting is provided by a central battery bank with ~6 batteries serving remote heads located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	20	MAR-11

**D5020.02.03.03 Exit Signs\***

Incandescent exit signs located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1960	0	MAR-11

**Event: Install LED Exit Signs (~14 ea.)**

**Concern:**

Incandescent lights are less efficient than LEDs and are more costly to maintain.

**Recommendation:**

Replace incandescent exit signs with LED exit signs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2011	\$8,400	Medium

**Updated:** MAR-11

**D5020.03.01.04 Exterior H.P. Sodium Fixtures\***

Wall mounted high pressure sodium light fixtures around the school perimeter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1972	0	MAR-11

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

Simplex 4002 fire alarm panel and Silent Knight Communicator. End devices include heat and smoke detectors, strobes/bells, duct smoke detection devices and pull stations.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	2000	25	MAR-11

**Event: Replace Detection and Fire Alarm (~4077 m2/gfa)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2025	\$112,100	Unassigned

**Updated:** MAR-11

**D5030.02.02 Intrusion Detection\*\***

The Silent Knight/Regency security system monitors exterior door contacts and motion detectors installed in the corridors and sensitive areas.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2000	25	MAR-11

**Event: Replace Panel and 14 Sensor Units**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2025	\$14,500	Unassigned

**Updated:** MAR-11

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

The school is equipped with a Simplex time panel.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	2000	0	MAR-11

**D5030.04.01 Telephone Systems\***

The building is equipped with a Nortel Northstar Meridian telephone system which provides internal/external calling, paging and intercom functions throughout.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	1998	0	MAR-11

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

LAN and WLAN system installed throughout the school with Cat 5 cabling.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	2000	0	MAR-11

**D5030.05 Public Address and Music Systems\*\***

Bogen PA system located in the main office. Speakers are located in the corridors and classrooms. Portable theatrical sound system located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1960	20	MAR-11

**Event: Replace PA and Sound System (3 ea.)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$16,000	Unassigned

**Updated:** MAR-11

**D5030.06 Television Systems\***

CATV provided throughout by Shaw Cable Systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-11

## S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

### E1020.02 Library Equipment\*

Wooden fixed and moveable shelving, checkout desk, desks, chairs, computers etc.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11

### E1020.03 Theater and Stage Equipment\*

Stage curtains and various theatrical equipment stored back stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

### E1090.07 Athletic, Recreational, and Therapeutic Equipment\*

Wall mounted basketball nets.  
Miscellaneous program equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1962	0	MAR-11

### E2010.02 Fixed Casework\*\*

Wooden fixed casework throughout 1930 Section and 1972 Addition in classrooms, staff room, library, and offices.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1930	35	MAR-11

#### Event: Replace Fixed Casework (~4077 m2/gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$373,600	Unassigned

**Updated:** MAR-11

### E2010.03.01 Blinds\*\*

Horizontal blinds present in classrooms and offices.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	MAR-11

#### Event: Replace Blinds (~120 m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$12,900	Unassigned

**Updated:** MAR-11

## S8 FUNCTIONAL ASSESSMENT

### K3010.04 Power Supply & Electrical Outlets\* - Surge Suppression

None provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	MAR-11

**Event:** Install System-Based Surge Suppressor (1 unit)

**Concern:**

The main server relies on a powerbar for protection from fluctuations in power supply. All other computers and sensitive electronics are not protected.

**Recommendation:**

Install a system based surge suppressor on the main power supply.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2011	\$3,500	Medium

**Updated:** MAR-11

### K3020.03 Air Conditioning/Cooling\* - Computer Room A/C

None provided for computers and servers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	MAR-11

**Event:** Provide Server Room A/C (1 unit)

**Concern:**

No air conditioning provided for the server room. Computers and servers rely on base-building ventilation and keeping doors open for cooling.

**Recommendation:**

Install server room air conditioning.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2011	\$18,200	Medium

**Updated:** MAR-11



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

A paved asphalt section is provided from the gravel parking lot to the west entrance of the 1962 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2008	0	MAR-11

**Event: Provide Designated Handicap Parking Stall**

**Concern:**

No paved handicapped parking stall or area provided.  
No access from parking lot to main entrance.

**Recommendation:**

Provide a marked paved handicapped parking stall by an entrance or in the gravel parking area. Provide a barrier free accessible route from the designated parking stall to the main entrance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2012	\$1,000	Low

**Updated:** MAR-11

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

None provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	MAR-11

**Event: Install Automatic Door Opener (1 unit)**

**Concern:**

No barrier free accessible entrance provided to any of the building sections.

**Recommendation:**

Provide automatic door openers on at least one entrance to the school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2012	\$7,500	Low

**Updated:** MAR-11

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

Horizontal pathways are structurally sound and of sufficient width to allow wheelchair passage.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	0	0	MAR-11

**Event: Install Lifts (~3 units)**

**Concern:**

No barrier free access to the stage or between floors.

**Recommendation:**

Provide an attendant wheelchair lift between floors.  
Install a lift at the stage and main entrance stairs to allow barrier free access.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Barrier Free Access Upgrade	2012	\$77,800	Low

**Updated:** MAR-11

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

Universal BFA washroom provided on the main floor of the 1962 Addition. Requires lever-type handset on door (upgrade < \$1000).

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1962	0	MAR-11

**K4030.01 Asbestos\***

Asbestos management plan is currently in affect and survey was completed.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	1930	0	MAR-11

**Event: Continue Asbestos Management Program**

**Concern:**

Asbestos has been present in certain building materials (ie. pipe insulation and joint compounds).

**Recommendation:**

Continue with existing asbestos management program with periodic update surveys.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Preventative Maintenance	2013	\$8,500	Medium

**Updated:** MAR-11

**Event: Encapsulate Exposed Asbestos Insulation (Rough Estimate)**

**Concern:**

Asbestos-containing pipe insulation is exposed at joints in mechanical rooms.

**Recommendation:**

Encapsulate exposed friable asbestos pipe insulation. This condition evaluation did not include a comprehensive quality survey; therefore, an "order of magnitude" estimate has been provided herein.

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Hazardous Materials Abatement	2011	\$15,000	Medium

**Updated:** MAR-11

**K4030.03 Mercury\***

Some mercury vapour lighting present. Flourescent lamps contain small amounts of mercury vapour.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	0	0	MAR-11

**K4030.04 Mould\***

No visible suspect mould identified. No mould issues reported.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	0	0	MAR-11

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

Petroleum based products, paints, and solvents are found throughout the custodian rooms. Various chemicals in Science room. All products are kept in appropriate areas and containers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11

**K5010 Reports and Studies\***

Rideau Park School was evaluated on November 2, 2010 by Golder Associates Ltd.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-11



Rideau Park School - Site Plan (1998)