

RECAPP Facility Evaluation Report

Edmonton School District No. 7



Holyrood Elementary School

B3156A
Edmonton

Facility Details

Building Name: Holyrood Elementary School
Address: 7920 - 94 Avenue
Location: Edmonton

Building Id: B3156A
Gross Area (sq. m): 0.00
Replacement Cost: \$5,944,625
Construction Year: 0

Evaluation Details

Evaluation Company: Kenneth M. Lee Architect
Evaluation Date: November 4 2005
Evaluator Name: Mr. Kenneth Lee

Total Maintenance Events Next 5 years: \$163,817
5 year Facility Condition Index (FCI): 2.76%

General Summary:

The original one storey 2,283.90 sq.m. (stucco & brick clad, wood frame construction) school was constructed in 1955. In 1957, a one storey 1,400.00 sq.m. (stucco & brick clad, wood frame construction) addition was constructed. One free standing portable (wood frame construction) was installed in 1994. Two free standing portables (wood frame construction) were installed in 2003 (One is made in 1994 and one is made in 1998.). The student capacity is 414. The building is non-sprinklered and is in good condition.

Structural Summary:

The 1955 original building and the 1957 addition have concrete wall foundations with continuous concrete footings. The roof structure of the lower portion of the 1955 original building and the 1957 addition is plywood deck on wood joists supported by wood frame walls. The roof structure of the 1955 gymnasium is plywood deck on wood joists and open web steel trusses supported by wood frame walls. The structure of the building is in good condition.

Envelope Summary:

The exterior walls are clad with stucco, brick and corrugated asbestos panels. The windows are aluminum. The entrance doors are solid core wood doors except the aluminum door at the barrier free entrance from the parking lot. The roof of 1955 and 1957 phases are BUR. The building envelope is in good condition.

Interior Summary:

Resilient sheet flooring in corridors, classrooms and resource room. Carpet in library, administration areas, staff room, conference room, computer room and music room. Walls are painted gypsum board and some areas have vinyl wall covering. Ceilings are plaster and painted gypsum board.

Mechanical Summary:

Some of the plumbing piping has been replaced but many segments are original and require replacement. The heating plant for the school is steam and is in poor condition. The heating boilers, piping, convectors, and room controls should be replaced with a new hot water system. A new central heat recovery ventilation system should also be provided to replace the unit ventilators and central exhaust system which are in poor condition and do not provide adequate indoor air quality or comfort control. A new EMCS control system should be provided. The heating and ventilation furnace for two of the portable should be repaired and controls upgraded to ensure adequate ventilation of the space.

Electrical Summary:

Install new 600 Amp, 120/208 volt single phase switchgear and main distribution panel. Install five new electrical panels in service rooms and hallways. Replace existing wiring with new wiring. Add new feeders based on panel loads. Replace fire alarm panel with new controller. Add new strobes in the school. Add smoke detection in library. School has a rating of marginal.

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*

1955, 1957 - Concrete wall foundation with continuous concrete footing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

A1030 Slab on Grade*

1955 - Boiler room.

1957 - The small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

A2020 Basement Walls (& Crawl Space)*

1957 - The small basement below the music room has concrete walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.01 Floor Structural Frame*(Building Frame)

1955, 1957 - The floor of the building is above crawl space. The floor is plywood deck on wood joists supported by concrete wall foundation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.02 Structural Interior Walls Supporting Floors*

1955, 1957 - Wood frame walls except the small basement below the music room.

1957 - Concrete wall in small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.03 Floor Decks, Slabs, and Toppings*

1955, 1957 - Plywood deck with floor finish except boiler room and the small basement below the music room.

1955 - Boiler room has concrete slab on grade.

1957 - The small basement below the music room has concrete slab on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.07 Exterior Stairs**

1955, 1957 - Concrete exterior stairs at all entrances except the barrier free entrance from the parking lot to the 1955 original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	40	NOV-05

Event: **Replace the existing metal nosing edge stripes with non-slip nosing stripes.**

Concern:

The exterior concrete stairs have the original metal edge nosing stripes. People can trip and fall.

Recommendation:

Replace the existing metal nosing edge stripes with non-slip nosing strips (8 stairs).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2007	\$3,745	Medium

Updated: February 1 2006

B1020.01 Roof Structural Frame*

1955, 1957 - Plywood deck on wood joists supported by wood frame walls.

1955 - Gymnasium has plywood deck on wood joists and open web steel trusses supported by wood frame walls.

1957 - Music room has plywood deck on wood joists and wood beams supported wood frame walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1020.04 Canopies*

1955, 1957 - Canopies have wood frame construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

1955 - Brick masonry cladding at main entrance and a brick chimney.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	NOV-05

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

1955, 1957 - Stucco on all phases.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	NOV-05

B2010.01.09 Expansion Control: Exterior Wall Skin*

1955, 1957 - All phases have original expansion control joints.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	NOV-05

B2010.01.99 Other Exterior Wall Skin*

1955 - The lower portion of the south wall and east wall have painted corrugated asbestos panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

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

1955, 1957 - All phases have wood frame walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B2010.06 Exterior Louvers, Grilles, and Screens*

1955, 1957 - All phases have original louvers and grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

B2010.09 Exterior Soffits*

1955, 1957 - Original plywood soffit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	NOV-05

Event: **Re-paint some soffit.**

Concern:

Paint peeling off from soffits at a number of locations.

Recommendation:

Re-paint soffits that paint is no longer adhering to.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$8,560	Medium

Updated: February 1 2006

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

1955, 1957 - Aluminum windows for all phases.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

B2030.01.01 Aluminum-Framed Storefronts**

1955 - At entrance from parking lot with barrier free push paddles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	NOV-05

B2030.01.06 Automatic Entrance Doors**

1955 - At entrance from parking lot with barrier free push paddles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	NOV-05

B2030.01.10 Wood Entrance Door**

1955, 1957 - Solid core wood doors with wood frames at all entrances except the barrier free entrance from the parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

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

1955 - Re-roofed BUR in 1987.

1957 - Re-roofed BUR in 1988.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

B3010.08.02 Metal Gutters and Downspouts**

1955, 1957 - Metal gutter and downspouts for all phases.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

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

There are vents, chimneys, exhaust hoods and hatches on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	NOV-05

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

1955, 1957 - Gypsum board on wood frame partitions throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	NOV-05

C1010.05 Interior Windows*

1955 - Tempered glass set in pressed metal frame windows at the administration area.

1957 - Tempered glass set in pressed metal frame windows at the music room area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	NOV-05

C1020.01 Interior Swinging Doors**

1955, 1957 - Solid core wood doors with wood frames for classrooms, administration area, washrooms, staff room, kitchen, library, gymnasium and gym. storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C1020.03 Interior Fire Doors*

1955, 1957 - Hollow metal doors set in pressed steel frames for boiler room, corridors and crawl space access.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C1030.01 Visual Display Boards**

Chalkboards, whiteboards, and tackboards located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	10	NOV-05

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

1955, 1957 - Floor supported metal toilet partitions throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C1030.08 Interior Identifying Devices*

Plastic signs in most areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	10	NOV-05

C1030.10 Lockers**

1957 - The original 1957 metal lockers in the corridor and in the entrance hallway from the parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: **Install 200 new single tier metal lockers.**

Concern:

The school has 414 students and has less than 200 lockers. These lockers are located in the 1957 addition. It is inconvenient for the students in the 1955 original building to use these lockers.

Recommendation:

Install 200 new single tier metal lockers in the 1955 original building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2007	\$23,540	Medium

Updated: February 1 2006

**C1030.12 Storage Shelving***

Clear finish and painted plywood storage shelving throughout.
One storage room has clear finish wood frame/ plywood storage shelving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial grade mirrors, soap dispensers, paper towel dispensers and toilet tissue holders located in all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	NOV-05

C2010 Stair Construction*

1955 - Wood stairs to the stage. Concrete stairs in the boiler room.
1957 - Wood stair from the music room to the small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

C2020.05 Resilient Stair Finishes**

1955 - Resilient finish on the stairs to the stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C2020.08 Stair Railings and Balustrades*

1955 - Metal railing for stairs in the boiler room. Metal handrails for the stairs to the stage.

1957 - Metal railing and balustrade for the raised platform in the music room. Metal railing for the stair from the music room to the small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	NOV-05

C3010.01 Concrete Wall Finishes*

1955 - Painted concrete wall finish in the boiler room.

1957 - Painted concrete wall finish in the small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

C3010.02 Wall Paneling**

1957 - Wood acoustic panels in music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	NOV-05

C3010.04 Gypsum Board Wall Finishes*

1955, 1957 - Gypsum board on wood frame partitions throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	NOV-05

C3010.06 Tile Wall Finishes**

1955, 1957 - Ceramic wall tiles in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	NOV-05

C3010.09 Acoustical Wall Treatment**

1957 - Wood acoustic panels in music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	NOV-05

C3010.11 Interior Wall Painting**

1955, 1957 - Majority of wall surfaces are painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	5	NOV-05

Event: **Paint selected rooms in the building.**

Concern:

Paint peeling off, chipped and stained in various rooms.

Recommendation:

Paint damaged surfaces in the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$16,050	Medium

Updated: February 1 2006

**C3010.12 Wall Coverings****

1955, 1957 - Vinyl wall covering in classrooms and administration areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	10	NOV-05

C3010.14 Other Wall Finishes**

1955, 1957 - Plywood on the lower portion of the walls in corridors and gymnasium.

1955 - Tentest board on the upper portion of the walls in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

C3020.01 Concrete Floor Finishes (Paint)*

1955 - Painted concrete floor in boiler room and care-taker's office.

1957 - Painted concrete floor in the small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	NOV-05

C3020.02 Tile Floor Finishes**

1955, 1957- Ceramic floor tiles on floor areas at urinals in boys' washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	NOV-05

C3020.03 Terrazzo Floor Finishes*

1955 - Terrazzo floor finish in the boys' washroom and girls' washroom, main entrance vestibule and vestibule next to girls' washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	NOV-05

C3020.04 Wood Flooring**

1955 - Wood strip flooring in gymnasium and stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	NOV-05

Event: **Repair and refinish gymnasium floor.**

Concern:

The surface is worn out . Joints in the hardwood flooring are starting to open up.

Recommendation:

Sand down, repair joints and re-finish hardwood flooring (220 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2007	\$39,055	Medium

Updated: February 1 2006

C3020.07 Resilient Flooring**

1955, 1957 - Sheet vinyl flooring in corridors, resource room, handicapped washroom, art room, a/c resource room, staff room kitchen, vestibule next to boys' washroom and vestibule next to gymnasium.
 1955, 1957 - The original linoleum in 17 classrooms and chair storage room.
 1955, 1957 - Vinyl floor tiles in men's washroom, women's washroom, storage rooms, kitchen.

Rating	Installed	Design Life	Updated
3 - Marginal	0	20	NOV-05

Event: **Replace the original linoleum with new vinyl sheet flooring.**

Concern:

The original linoleum is showing wear, some joints opening up.

Recommendation:

Replace the original linoleum in 17 classrooms and chair storage room with new vinyl sheet flooring (1,290.00 sq.m.).

Type	Year	Cost	Priority
Lifecycle Replacement	2011	\$101,650	Medium

Updated: February 1 2006

Event: **Replace the original vinyl floor tiles with new vinyl sheet flooring.**

Concern:

The original vinyl floor tiles are showing wear, some joints opening up.

Recommendation:

Replace vinyl floor tiles in men's washroom., women's washroom, storage rooms and kitchen with new vinyl sheet flooring (125.00 sq.m.).

Type	Year	Cost	Priority
Lifecycle Replacement	2011	\$9,630	Medium

Updated: February 1 2006

C3020.08 Carpet Flooring**

1955, 1957 - Carpet in administration areas, staff room, conference room, library, computer room, and music room. (Note: There are small areas of carpet on the linoleum in the classrooms.)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	10	NOV-05

Event: Replace carpet in library, computer room and music room.

Concern:

The carpet in library, computer room and music room is worn and stained.

Recommendation:

Replace carpet (155.00 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$11,235	Medium

Updated: February 1 2006

C3020.11 Floor Painting

1955 - Painted concrete floor in boiler room and care-taker's office.
1957 - Painted concrete floor in the small basement below the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	5	NOV-05

C3030.03 Plaster Ceiling Finishes*

1955, 1957 - Plaster ceiling finish in classrooms, administration areas, library, corridors, staff room, resource room, computer room, art room, music room and conference room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

Event: The ceilings of the principal office and vice-principal office have cracks.

Concern:

The ceilings of the principal office and vice-principal office have cracks. These cracks are located at the exterior wall which might due to settlement of the foundation.

Recommendation:

Hire a Structural Engineer to investigate and repair the ceilings.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2007	\$2,675	Medium

Updated: February 1 2006

C3030.04 Gypsum Board Ceiling Finishes*

1955, 1957 - Painted gypsum board ceiling in boys' washroom, girls' washroom, kitchen, vestibules, gymnasium, gym, storage rooms, chair storage room, storage rooms, boiler room, the small basement below the music room and care-taker's office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

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

1955- Suspended T-bar ceiling in handicapped washroom, and 3 small rooms in the corridor next to the administration areas. Water stain on the ceiling tiles of one of these small rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

C3030.07 Interior Ceiling Painting**

1955, 1957 - Gypsum board ceilings are painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	NOV-05

D1010.02 Lifts**

1955 - A handicapped chair lift to stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	NOV-05

S4 MECHANICAL**D2010.01 Water Closets****

(c1970) Floor mounted flush valve water closets are used in the student washrooms. Staff washrooms and ADA washroom use flush tank water closets. Seating configurations are generally elongated bowls with open fronts in all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.02 Urinals**

(c1970) Floor mounted urinals with flush valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.03 Lavatories**

(1993) Vanity mounted stainless steel lavatories in the staff and ADA washroom with either lever handle faucets or push-button mixing faucets.

(c1985) Student washrooms have fibreglass gang wash fountains with pushbutton actuators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: Replace Wash Fountains.**Concern:**

Wash fountains are in poor condition and may not meet the spacing requirements of the current building code.

Recommendation:

Replace wash fountains with two new wash fountains in each washrooms or with a total of eight vanity mounted stainless steel sinks with sensor actuated faucets.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2007	\$10,272	Low

Updated: February 1 2006

D2010.04 Sinks**

Single compartment stainless steel sinks for staff room, music room, and in the small kitchen off the gymnasium.

(1993) Classrooms have single compartment stainless steel sinks with goosenecks, 3-blade handles, and bubblers.

Two compartment stainless steel sink and a single compartment custom stainless steel sink in the art room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.08 Drinking Fountains / Coolers**

China drinking fountains in the corridors with double bubblers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.09 Other Plumbing Fixtures**

Wall hunge janitors sink in the music room closet and in the custodial storage room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: Replace Janitor's Sinks.**Concern:**

Finishes are worn off and elevated sinks are difficult and potentially hazardous to use.

Recommendation:

Replace two wall mounted janitor's sinks with floor mounted sinks.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$3,210	Medium

Updated: February 1 2006

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper and galvanized piping is used on domestic water piping throughout. Some galvanized piping has been replaced, but much or the original remains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D2020.01.03 Piping Specialties (Backflow Preventors)**

(1998) Backflow prevention has been installed on boiler make-up water lines.

(1998) Vacuum breakers provided on janitor's sinks and art room sink.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2020.02.02 Plumbing Pumps: Domestic Water**

(c1985) Bell & Gosset Bronze in-line circulator located in crawl space next to mechanical room used for domestic hot water recirculation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

D2020.02.06 Domestic Water Heaters**

(2003) John Wood JW 502-NA tank type natural gas water heater used to provide domestic hot water to main school. 11.7 kW input, 190 litre capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	NOV-05

D2020.03 Water Supply Insulation*: Domestic

Domestic hot and cold water is insulated throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2030.01 Waste and Vent Piping*

(1955) Cast iron bell and spigot sanitary piping used throughout. Some plastic piping used for some repairs and recent revisions. A small number of repairs have been made but piping appears to be adequate.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D2030.02 Waste Piping Specialties*

Sediment trap used for art room sink.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D2030.03 Waste Piping Equipment*

Sanitary sump pit located in boiler room complete with simplex pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2040.01 Rain Water Drainage Piping Systems*

(1955) Storm drainage piping from the roof is cast iron bell and spigot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D2040.02.04 Roof Drains**

(1955) Open flow roof drains with plastic strainers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D3010.02 Gas Supply Systems*

(1955) 100mm medium pressure gas service to the mechanical room. Gas meter is located in the mechanical room. Gas is regulated to 1.75 kPa to serve the equipment in the mechanical room. A 65mm low pressure gas line leads across the roof to the north end of the east wing then drops down to run underground to the portables. Piping is steel with screwed and welded fittings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D3020.01.01 Heating Boilers & Accessories: Steam**

(1955) Two Brownweld Model 6000 low pressure steam boilers provide heating for the school. Boilers have a capacity of 2037 kg/hr output.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	NOV-05

Event: Replace Heating Boilers.**Concern:**

Boilers are 50 years old. They are very inefficient and very difficult to control. Temperature complaints have been ongoing for years.

Recommendation:

Replace the boilers with two 586 kW induced draft hot water heating boilers and primary circulating pumps. (see also D3040.02, Steam Distribution System)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$94,053	High

Updated: February 1 2006

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

(1955) Insulated breaching with barometric draft dampers connecting to masonry chimney. Combustion air to floor with control dampers tied to boiler controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

D3020.01.04 Water Treatment: Steam Boilers*

Ongoing treatment with "Aqua-Guard" amine solution.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

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

B-vent used for furnace venting through the room. Combustion air is provided into insulated system enclosure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

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

(1955) Steel steam and condensate piping is used throughout. Minor leak repair and trap service is carried out on an ongoing basis.

Condensate receiver and single feed pump are located in the mechanical room adjacent to the boilers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: Replace/Upgrade Heating Distribution.**Concern:**

Heating system performs poorly and is very inefficient. There are many complaints related to the space comfort.

Recommendation:

Modify steam and replace condensate piping for use with hot water distribution system including secondary distribution pumps. Based on 2685 sq.m. See also D3020.01.01.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2008	\$171,200	Medium

Updated: February 1 2006

D3040.04.01 Fans: Exhaust**

(1955/1957) Belted vent sets located on the roof extract air from the classrooms and classroom corridors. Tempered fresh air supplied into the classroom spaces from the unit ventilators. The system is automatically controlled with the exhaust fans shut down at night and when the outside air temperature is too low.

(1955) Roof mounted belted vent sets extract air from the student washrooms continuously during occupied hours.

(1988) Spun aluminum fan extracts exhaust air from the staff washrooms.

(1993) Spun aluminum fan extracts exhaust air from the art room's kiln exhaust hood.

(2001) Roof mounted cabinet exhaust fans extract air from the crawl space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: Replace central exhaust systems.**Concern:**

Exhaust air fans are 50 years old. They run at constant volume, extracting air from the classrooms. Make-up air is delivered through the unit ventilators. The fans are automatically shut off when the outdoor temperatures is below about zero, significantly reducing the schools ventilation rates.

Recommendation:

Provide six new 700 lps heat recovery ventilation systems and associated ductwork to supply fresh air to the classrooms. This will result in better indoor air quality and lower energy costs. (Refer also to D3050.05.08)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2008	\$128,400	Medium

Updated: February 1 2006

D3040.04.03 Ducts: Exhaust*

Low pressure ductwork runs through main floor ceiling space and is distributed down to wall grilles above the floor through interior wall duct chases.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D3040.04.05 Air Outlets and Inlets: Exhaust*

Wall grills located at high level in the interior walls of the washrooms.
Wall grills located at low level in the demising walls of the classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D3050.05.01 Convectors**

(1955/1957) Surface mounted steam convection units are used in the 1955 vestibules and in association with unit ventilators in the classrooms. Many have been isolated and are not used. This was done as an energy saving strategy in about 1984.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: Re-commission Convectors.**Concern:**

Many of the classroom convectors have been isolated in a misguided attempt to reduce energy consumption. This now required that the unit ventilators cycle at night to maintain space temperature. The result would be higher overall energy use.

Recommendation:

Re-commission approximately 40 convectors and revise for hot water operation in conjunction with D3040.02.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$21,400	Medium

Updated: February 1 2006

D3050.05.03 Finned Tube Radiation**

(1993) 450mm high sloped top fin tube radiation cabinets were added in a number of locations during the modernization.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D3050.05.06 Unit Heaters**

(1957) Steam cabinet unit heater is used at the northwest entrance doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3050.05.07 Unit Ventilators**

(1955) Nesbitt steam unit ventilators are used in the classrooms, staffroom, office and gymnasium.

(1957) Trane steam unit ventilators are used in the classrooms in the 1957 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: Upgrade Unit Ventilators.**Concern:**

Many concerns were noted with the unit ventilators. A number were not running. Damper and control valve operation was not consistent. Temperature control is poor and there are many complaints. These units are 50 years old and require a ongoing servicing and control upgrade. CO2 levels were measured in a number of classrooms and ranged between a low of 850ppm and a high of over 1700 ppm.

Recommendation:

Remove 28 unit ventilators. Refit and re-commission existing convection units to operate with hot water in conjunction with boiler replacement (D3020.01.01) and heat recovery ventilation system (D3040.04.01).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$14,980	Medium

Updated: February 1 2006

D3060.02.01 Electric and Electronic Controls**

(1993/1994) Programmable stats with occupied/unoccupied fan control have been provided for three portable classroom furnaces.

(1957) Line voltage thermostat cycles the cabinet unit heater fan on a call for heat.

(1985) Paragon EC128 programmable system sequencer was installed as part of and Energy Conservation Program. Unit acts as a time-clock and sequencer for the boilers, and exhaust fans and controls the dual pressure pneumatic control system, allowing night setback and override control

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3060.02.02 Pneumatic Controls**

(1985) Brunner simplex tank-mounted control compressor with Hankison refrigerated air dryer. Pneumatic actuators on valves and dampers in the mechanical room. Dual pressure pneumatic thermostats and Johnson Controls valve actuators for main building perimeter convection units and unit ventilators allows day/night operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Handheld dry chemical and water pump fire extinguishers throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: Replace Fire Extinguishers**Concern:**

Water pump fire extinguishers are not effective against most fires and are difficult to use.

Recommendation:

Replace 12 water pump fire extinguishers with ABC dry chemical extinguishers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$2,568	Low

Updated: February 1 2006

S5 ELECTRICAL**D5010.01 Main Electrical Transformers****

Transformer located inside the school's mechanical room, inside a locked vault.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

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

1955 Electric Manufacturing Switchgear. 600 Amp, 125/250 Volt single phase. Peak at 67 kVA.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	40	NOV-05

Event: **Install new 600 Amp, 120/208 volt single phase switchgear and main distribution panel.**

Concern:

Main switchgear is manufactured by Electric Manufacturing, 1950's vintage. Equipment insulation characteristics are obsolete. Spare parts not available.

Recommendation:

Install new 600 Amp, 120/208 volt single phase switchgear and main distribution panel.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$16,050	High

Updated: February 1 2006

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

1999 Federal pioneer panels at 80% capacity located outside computer room. 1955 panels are located in other areas and service rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	NOV-05

Event: **Install five new electrical panels in service rooms and hallways.**

Concern:

Panels insulation characteristics are obsolete. Panels are full. Spare parts not available.

Recommendation:

Install five new electrical panels in service rooms and hallways.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$12,840	High

Updated: February 1 2006

D5010.07.02 Motor Starters and Accessories**

1990's Honeywell motor disconnects. Boiler motors managed by Paragon EC128.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D5020.01 Electrical Branch Wiring*

1955 wiring installed in conduit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	50	NOV-05

Event: Replace existing wiring with new wiring. Add new feeders based on panel loads.

Concern:

Existing wiring insulation have passed its expected life. Some feeders might be over loaded.

Recommendation:

Replace existing wiring with new wiring. Add new feeders based on panel loads.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$42,800	Medium

Updated: February 1 2006

D5020.02 Interior Lighting

2003 Fluorescent light fixtures c/w T8 lamps and electronic ballasts have been installed in school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

D5020.02.01 Lighting Accessories (Lighting Controls)*

120 volt line voltage switching used for interior lighting systems in hallways, gym, classrooms and offices. Exterior lighting is control by photocells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D5020.02.03 Emergency Lighting*

Lumacell battery packs c/w single and dual emergency lighting heads located at required areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D5020.02.03.03 Exit Signs

Lumacell LED exit signs located at required exits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D5020.03 Exterior Building Lighting

HPS ceiling mounted light fixtures located at exterior exits. Perimeter of school does not have lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.01 Detection and Fire Alarm**

1986 Simplex 2001 fire alarm panel. Bells are located in hallways. Detection devices located through school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	NOV-05

Event: **Replace fire alarm panel with new controller. Add new strobes in the school. Add smoke detection in library.**

Concern:

Fire alarm panel spare parts not available. Panel reached end of life. Strobes are not available for the hearing impaired. Library does not have detection.

Recommendation:

Replace fire alarm panel with new controller. Add new strobes in the school. Add smoke detection in library.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$21,400	Medium

Updated: February 1 2006

D5030.02.02 Intrusion Detection**

1999 Magnum Alert alarm system, connected to the School board central.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.03 Clock and Program Systems**

Individual 120 volt clocks in hallways and classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.04.01 Telephone Systems**

Meridian Nortel telephone system with three lines and handsets in classrooms. Connected to the PA system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.04.04 Data Systems**

Supernet in school. Cisco switch c/w 24 outlets 10% full. Two HP switches at 100% full. Connected to dedicated receptacles. Compaq server.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.04.05 Local Area Network Systems*

Cat5 cables in conduit and free air in ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.05 Public Address and Music Systems**

1994 Bogen Multicom 2000 with speakers in classrooms. Controls period bell tones. Sound system on stage is Rauland System.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

D5030.06 Television Systems*

2000 Toshiba televisions in some classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

D5090.01 Uninterruptible Power Supply Systems**

APC UPS for computer server.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1090.04 Residential Equipment***

1955 - A microwave oven in the kitchen of the resource room. Residential grade range, stove, refrigerator and microwave in the staff room.

1957 - Residential grade range, stove, microwave, small counter top oven and refrigerator in the small kitchen. Residential grade range, stove, washer, dryer, and refrigerator in the art room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Four basketball backboards and wall mounted wood climbing exercise bars in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	NOV-05

E2010.02.05 Educational Facility Casework*

1955, 1957 - Painted and plastic laminated plywood casework throughout classrooms. The classrooms need more casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	NOV-05

Event: Install additional casework to classrooms.

Concern:

The classrooms need more additional casework.

Recommendation:

Install additional casework for classrooms (18 classrooms).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2007	\$69,550	Medium

Updated: February 1 2006

E2010.02.07 Kitchen Casework*

1955 - Plastic laminate clad cabinets with plastic laminate countertops in the kitchen of the resource room and staff room.

1957 - Plastic laminate clad cabinets with plastic laminate countertops in the small kitchen and the art room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

E2010.02.08 Laboratory Casework*

Cabinets with plastic laminate countertops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

E2010.02.09 Library Casework*

Plastic laminate plywood shelves along the walls. Movable plastic modular shelves for dividers. Plastic laminate desk and counter for check out.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

E2010.03.01 Blinds**

Venetian blinds in administration area and classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	NOV-05

F1010.02.04 Portable and Mobile Buildings*

ARCHITECTURE: One portables was installed in 1994. Two portables were installed in 2003 (One is made in 1994 and one is made in 1998.). They are free standing and are not barrier free. These portables are wood frame construction with metal siding, SBS roof membrane, aluminum glazed windows complete with wire mesh, hollow metal doors with pressed steel frames. Interior components include vinyl sheet flooring, carpet, vinyl covered gypsum wall board, suspended T-bar ceiling with acoustic tiles, painted/clear finish millwork and white boards/ tack boards. They have exterior steel stairs.

MECHANICAL :

1988 - Palm-Air vertical classroom ventilation unit in northeast portable. Gas-fired furnace was replaced in 2003. Unit runs continuously during occupied hours to provide heating and ventilation.

1994 - Silent-Air vertical classroom ventilation unit in northwest portable. Unit uses Lennox, Whisper-Heat gas fired furnace and runs continuously during occupied hours to provide heating and ventilation.

1994 - Silent-Air vertical classroom ventilation unit in northwest portable. Original Lennox gas fired furnace was replaced in 2005 with a similar Carrier unit that runs continuously during occupied hours to provide heating and ventilation.

The heating and ventilation furnaces for two of the portables should be repaired and controls upgraded to ensure adequate ventilation of the space.

ELECTRICAL: Aerial service to portables' panels from main building. Fluorescent T12 light fixtures for interior lighting. Line voltage light switching. Local smoke alarm.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: Repair/ Revise Damper Controls.**Concern:**

Measured CO2 levels in the northeast and northwest portables were 2200 ppm and 1400 ppm respectively. This is significantly higher than prescribed values which should be less than 1000 ppm. CO2 is used as an indicator of air quality and high CO2 levels indicate insufficient ventilation air rates.

Recommendation:

Upgrade damper controls and replace furnace heat exchangers on two ventilation furnace units as necessary to ensure the system can operate with high volumes of outside air. Consider two stage burners to provide more consistent supply temperatures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Hazardous Materials Abatement	2007	\$8,560	High

Updated: February 1 2006

F2020.01 Asbestos*

1955, 1957 - The latest hazardous material audit was done in May, 2000. Asbestos is in vinyl floor tile, boiler breaching and boiler insulation material in the boiler room, pipe fitting insulation in the boiler room and crawl space, packing in cast iron bell & spigot rain water leaders and sanitary drains, cement board in the portables above the heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

F2020.02 PCBs*

The school has not done any testing for PCBs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

S8 FUNCTIONAL ASSESSMENT**K4010.01 Barrier Free Route: Parking to Entrance**

Access provided from parking lot to an entrance of 1955 original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

K4010.02 Barrier Free Entrances

The door of the barrier free entrance of 1955 original building is equipped with assisted door operator.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	NOV-05

K4010.03 Barrier Free Interior Circulation

Access to all areas in the 1955 original building and the 1957 addition. There is a handicapped chair lift to the the stage in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	NOV-05

K4010.04 Barrier Free Washrooms

There is a barrier free washroom in the 1957 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	NOV-05

RECAPP Facility Evaluation Report



Holyrood Elementary School

S3156
Edmonton

Facility Details**Building Name:** Holyrood Elementary School**Address:****Location:** Edmonton**Building Id:** S3156**Gross Area (sq. m):** 0.00**Replacement Cost:** \$0**Construction Year:** 0**Evaluation Details****Evaluation Company:****Evaluation Date:** November 4 2005**Evaluator Name:****Total Maintenance Events Next 5 years:** \$78,164**5 year Facility Condition Index (FCI):** 0%**General Summary:**

Re-pave asphalt roadways, asphalt parking lot and gravel parking lot. Provide parking bumpers and additional parking lot signs. Replace concrete sidewalks at a few locations.

Transformer located inside the school in mechanical room. Exterior HPS ceiling mounted light fixtures are located over the exits. Car plug-ins are mounted on the exterior walls. Total of 11 car plug-ins.

Structural Summary:**Envelope Summary:****Interior Summary:****Mechanical Summary:****Electrical Summary:****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.

S7 SITE

G2010.02.02 Flexible Pavement Roadway (Asphalt)**

Two roadways (asphalt) from 79 Street to the central parking lot between the 1955 original building and the 1957 addition. There is a roadway (asphalt) connecting these 2 roadways on the east side of the the 1957 addition between the gravel parking lots. These roadways (asphalt) are not in good condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: Re-pave the roadways (asphalt).

Concern:

Two roadways (asphalt) from the 79 Street to the central parking lot and the connecting roadway (asphalt) are in poor condition.

Recommendation:

Re-pave these roadways (760 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$16,264	High

Updated: February 8 2006

G2010.05 Roadway Curbs and Gutters*

Concrete curb and gutter for the roadway from 97 Street at the north entrance of the 1955 original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2010.06 Roadway Appurtenances*

Two steel guard posts at the entrance of the south roadway from 79 Street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2020.02.01 Aggregate Parking Lots (Gravel)**

A parking lot (gravel) on the east side of the 1957 addition facing the portable classrooms. Another parking lot (gravel) on the west side of the portable classrooms. These 2 parking lots are facing each and are separated by a asphalt paved roadway. A lot of pot holes in these 2 parking lots.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: **There are a lot of pot holes in the parking lots (gravel). Re-pave these parking lots with asphalt. Install precast concrete bumpers for the parking stalls.**

Concern:

There are a lot of pot holes in the parking lots (gravel).

Recommendation:

Re-pave these parking lots with asphalt (590 sq.m.) and the cost is \$11,850.00. Install 16 precast concrete bumpers for the parking stalls and the cost is \$5,000.00.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$18,030	High

Updated: February 8 2006

G2020.02.02 Flexible Paving Parking Lots(Asphalt)**

There is a central parking lot (asphalt) between the 1955 original building and the 1957 addition. The asphalt pavement of the parking lot is not in good condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: **Re-pave the central parking lot.**

Concern:

There is a central parking lot (asphalt) between the 1955 original building and the 1957 addition. The asphalt pavement is not in good condition.

Recommendation:

Re-pave the parking lot (1,060.00 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$23,005	High

Updated: February 8 2006



G2020.06.02 Parking Bumpers*

1955,1957 - There are no parking bumpers for all parking stalls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: **1955, 1957 - There are no parking bumpers for all the parking stalls.**

Concern:

There are no parking bumpers for all parking stalls to protect the wall.

Recommendation:

Install 22 precast concrete bumpers for the parking stalls facing the wall.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2007	\$7,490	High

Updated: February 8 2006

G2020.06.03 Parking Lot Signs*

1955, 1957 - There are no parking lot signs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: **1955, 1957 - There are no parking lot signs.**

Concern:

There are no parking lot signs for information such as direction, staff parking stalls, visitors parking stalls.

Recommendation:

Install 10 parking lot signs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2007	\$4,280	High

Updated: February 8 2006

G2020.06.04 Pavement Markings*

1955, 1957 - There are no pavement markings for the parking stalls in the asphalt paved parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: **There are no pavement markings for the parking stalls in the asphalt paved parking lot.**

Concern:

There are no pavement markings for the parking stalls in the asphalt paved parking lot.

Recommendation:

Install pavement markings for the parking stalls in the asphalt paved parking lot (320.00 m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2007	\$2,140	High

Updated: February 8 2006

G2030.02.01 Gravel Pedestrian Surfacing*

Gravel pedestrain paved area between the east side of the 1955 original building and the trees along the sidewalk on 79 Street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Concrete sidewalks from 97 Street and 94 Avenue to the main entrance which has concrete pavement. A concrete sidewalk on the north side of the school site from 97 Street to the north entrance of 1957 addition. This entrance has a concrete pavement. Concrete sidewalk on the west side of the school building from 94 Avenue to the west entrance of the gymnasium which has concrete pavement. Concrete pavement at the entrance to the 1955 original building from the central parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: **Some concrete sidewalks are not in good condition. replace some concrete sidewalks.**

Concern:

Some concrete sidewalks are not in good condition and have various cracks. People can trip and fall.

Recommendation:

Replace those sidewalks that are not in good condition (75 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$11,235	High

Updated: February 8 2006

G2040.02 Fences and Gates**

A chain link fence by the side of the sidewalk on 79 Street between 2 asphalt paved roadways from 79 Street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2040.03 Athletic and Recreational Surfaces**

Children's playground, basketball courts and football field in the park by the side of the school site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2040.05 Site and Street Furnishings*

One set of picnic table and bench at the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2040.06 Exterior Signs*

A school name sign on the exterior wall of the main entrance. A free standing sign on the lawn facing 79 Street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2040.08 Flagpoles*

One floor mounted flag pole at the corner of 79 Street and 94 Avenue. One flag pole mounted on the east exterior wall of the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2050.04 Lawns and Grasses*

Lawn areas on the south, east, north and west sides of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2050.05 Trees, Plants and Ground Covers*

Trees on the south and east sides of the school. Shrubs and plants in front of the east exterior wall of the 1955 original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G2050.07 Planting Accessories*

A brick planter at the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G3010.02 Site Domestic Water Distribution*

100 mm water service is connected to the Municipal main below 94 Avenue to the south of the property. 50 mm water meter is located in the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G3010.03 Site Fire Protection Water Distribution*

Fire hydrants are located on 94 Avenue within 45 m of the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G3020.01 Sanitary Sewage Collection*

100 mm sanitary leaves the building from the crawl space and ties into the Municipal main below 94 Avenue to the south.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G3030.01 Storm Water Collection*

200 mm storm water piping leaves the building from the crawl space and ties into a 200 mm combined sewer connected to Municipal main below 94 Avenue to the south.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G3060.01 Gas Distribution*

100 mm medium pressure natural gas service from the utility main below 94 Avenue to the south of the property. Natural gas service enters the mechanical room from the north and is metered and regulated to low pressure. A 50 mm low pressure gas line runs across the roof of the northeast corner where it drops down the side of the building and runs underground to serve the portables.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G4010 Electrical Distribution

Transformer located inside the school's mechanical room, inside a locked vault.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G4010.04 Car Plugs-ins*

Wall mounted car plug-ins on the school walls. Total of 11 outlets for 22 parking stalls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

G4020.01 Area Lighting*

HPS ceiling mounted light fixtures located at the exterior exits. Perimeter of school does not have lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05