RECAPP Facility Evaluation Report

Edmonton School District No. 7

High Park Elementary School

B3148A

Edmonton

Report run on: June 8, 2006 7:27 AM

Facility Details

Building Name: High Park Elementary Schoc
Address: 11031 - 154 Street
Location: Edmonton

Building Id: B3148A
Gross Area (sq. m): 0.00
Replacement Cost: $2,711,029
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: **$263,702**
5 year Facility Condition Index (FCI): **9.73%**

General Summary:

The original one storey 1,060.00 sq.m. (wood frame, brick & stucco clad, concrete block, combustible) school was constructed in 1954.
In 1960, a one storey 703.6 sq.m. (wood frame, brick & stucco clad, concrete block, combustible) addition was constructed.
The current total gross area of the building is 1,763.60 sq.m..
The building is non-sprinklered and in good condition.
The student capacity is 115.

Structural Summary:

The 1954 original building and the 1960 addition have concrete wall foundation with continuous concrete footing. The roof structure of the 1954 original building and the lower portion of the 1960 addition is plywood deck on wood joists supported by wood frame walls. The roof structure of the 1960 gymnasium is plywood deck on wood joists on glulam beams supported by concrete blocks.
The structure is in good condition.

Envelope Summary:

The 1956 original building and the 1960 addition have painted concrete block walls and walls with brick & stucco claddings.
Windows were replaced with PVC windows in 1991 except the windows of the staff room. All exterior doors and frames were replaced with new hollow metal doors with pressed steel frames in 2002.
The roof of 1954 building and the 1960 addition is BUR. The BUR of the 1954 original building is not in good condition.

Interior Summary:

Carpet in classrooms, library and a portion of the corridor. Vinyl floor tiles in vestibule, science classroom, administration area and a portion of the corridor.
Walls are painted gypsum board and concrete block.
Ceilings are ceiling tile (300 mm x 300 mm), gypsum board and wood panels.

Mechanical Summary:

Heating is provided by hot water heating boilers and a primary/secondary distribution system installed in 1998. Ventilation rates seem adequate and air quality is reasonably good. and ventilation systems in good condition.
Water closets are old and inefficient and they do not meet current code requirements. These should be replaced.

Electrical Summary:

Install new 400 amp new switchgear and disconnect c/w distribution panel. Install five new electrical panels in service rooms and gym. Replace existing power wiring with new wiring. Add new feeders based on power panel loads. Replace fire alarm panel with new controller. Add new strobes in the school. Install new fluorescent light fixtures c/w T8 lamps and electronic ballasts. 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*

1954, 1960 phases - Concrete wall foundations (continuous footing).

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

A1030 Slab on Grade*

1954 - Boiler room.
1960 - Gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

A2020.01 Basement Wall Construction(& Crawl Space)

1954 - The boiler room has concrete walls.

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

B1010.01 Floor Structural Frame*(Building Frame)

1954, 1960 phases - The floor of the building is above crawl space except the gymnasium and the boiler room. The floor above the crawl space is plywood deck on wood joists.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

B1010.02 Structural Interior Walls Supporting Floors*

1954 - Wood frame walls and concrete block walls.
1960 - Concrete block wall for the gymnasium. The rest of the building has wood frame walls.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

B1010.03 Floor Decks, Slabs, and Toppings*

1954, 1960 - Plywood deck on wood joist except the gymnasium and boiler room.
1954 - Boiler room has concrete slab on grade.
1960 - Gymnasium has concrete slab on grade.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

B1010.06 Ramps: Exterior**

1960 - One exterior wood ramp at the main entrance.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	NOV-05

Event: Replace the wood ramp at the main entrance with a new concrete ramp.

Concern:
The wood ramp is not in good condition and needs frequent maintenance.

Recommendation:
Replace the wood ramp with a new concrete ramp.

Type	Year	Cost	Priority
Lifecycle Replacement	2011	$7,490	High

Updated: February 1 2006

B1010.07 Exterior Stairs**

1954 - Concrete stairs at all entrances except the entrance to the boiler room.
1960 - Concrete stairs at all entrances.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	NOV-05

B1020.01 Roof Structural Frame*

1954 - Plywood deck on wood joists supported by wood frame walls.
1960 - The roof of the gymnasium is plywood deck on wood joists on glulam beams supported by concrete block walls. The roof of the rest of the building is plywood deck on wood joists supported by wood frame walls.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

B1020.04 Canopies*

1954 - A small wood frame canopy above the exterior entrance to the boiler room.
1960 - A small wood frame canopy above the east exterior entrance to the gymnasium. The wood frame canopy above the west exterior entrance to the gymnasium is not in good condition.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

Event: Replace the canopy above the west exterior entrance to the gymnasium with a new canopy.

Concern:
The existing canopy above the west exterior entrance to the gymnasium is not in good condition and is not properly designed. Ice, snow and water falling directly onto the exterior exit stairs and cause hazardous situation.

Recommendation:
Replace the canopy with a new canopy of proper design.

Type	Year	Cost	Priority
Failure Replacement	2007	$3,745	High

Updated: February 1 2006

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

1954, 1960 - Brick masonry cladding to all phases.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	NOV-05

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

1954, 1960 - Painted concrete block walls to all phases.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	NOV-05

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

1954, 1960 - Stucco to all phases.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	NOV-05

B2010.01.09 Expansion Control: Exterior Wall Skin*

1954, 1960 - All phases have original expansion joints.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	NOV-05

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

1954, 1960 - Concrete block walls for all phases.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

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

1954, 1960 - Wood framing exterior walls for all phases.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	NOV-05

B2010.06 Exterior Louvers, Grilles, and Screens*

All phases have the original aluminum louvers and grilles.

Rating	Installed	Design Life	Updated
5 - Good	0	20	NOV-05

B2010.09 Exterior Soffits*

1954, 1960 - Painted plywood soffit for all phases.
1954 - Painted wood panel soffit at the north end of the building.

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

Event: Repaint the wood panel soffit at the north end of the 1954 original building.

Concern:
Paint peels off from the wood panel soffit at the north end of the 1954 original building.

Recommendation:
Repaint the wood panel soffit.

Type	Year	Cost	Priority
Failure Replacement	2007	$16,050	High

Updated: February 1 2006

B2020.01.01.05 Wood Windows (Glass & Frame)**

1954 - The staff room has the original wood windows.
(Note: All windows were replaced in 1991 except this room.)

Rating	Installed	Design Life	Updated
2 - Poor	0	20	NOV-05

Event: Replace the existing wood windows in the staff room.

Concern:
The staff room has the original 1954 wood windows which are not closing/sealing properly.

Recommendation:
Replace the existing wood windows and hardware with new PVC windows c/w hardware (8 units).

Type	Year	Cost	Priority
Failure Replacement	2007	$5,350	High

Updated: February 1 2006

B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows**

1954, 1960 - Windows were replaced with PVC windows in 1991 except the windows in the staff room.

Rating	Installed	Design Life	Updated
5 - Good	0	35	NOV-05

B2030.01.02 Steel-Framed Storefronts**

1954, 1960 - All exterior doors and door frames were replaced with new hollow metal doors and pressed steel door frames in 2002.

Rating	Installed	Design Life	Updated
6 - Excellent	0	15	NOV-05

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

1954 - BUR is not in good condition.
1960 - Re-roofed the BUR of the gymnasium in 1992.
1960 - Re-roofed the BUR of the 1960 addition in 2005 except the roof of the gymnasium.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	NOV-05

Event: Re-roof the BUR of the 1954 original building.

Concern:
The BUR of the 1954 original building is not in good condition.
Evidence of roof leakage.

Recommendation:
Re-roof the BUR of the 1954 original building (1,060.00 sq.m.)

Type	Year	Cost	Priority
Failure Replacement	2007	$83,460	High

Updated: February 1 2006

B3010.08.02 Metal Gutters and Downspouts**

1954, 1960 - Gutters and downspouts need repair and replacement in some areas.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	NOV-05

Event: 1954, 1960 - Gutters and downspouts need repair and replacement in some areas.

Concern:
1954, 1960 - Gutters and downspouts are not in good condition in some areas.

Recommendation:
Repair and replace those gutters and downspouts that are not in good condition.

Type	Year	Cost	Priority
Failure Replacement	2007	$2,675	Medium

Updated: February 1 2006

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

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

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

1954 - Gypsum board on wood frame partitions.
1960 - Gypsum board on wood frame partitions. Concrete block walls. Railings are required on the open sides of the stairs.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

C1010.05 Interior Windows*

1954, 1960 - Small wood frame windows with Georgian wired glass below the ceiling on the partitions between the classrooms and the corridor.
1954 - The administration area has tempered glass set in pressed metal frame windows.
1960 - Georgian wired glass and tempered glass set in pressed metal frames in vision sidelites and windows for doors at the interior of vestibules and for doors at corridor.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	NOV-05

C1020.01 Interior Swinging Doors**

1954, 1960 - Solid core wood doors in wood frames for classrooms, administration area, washrooms, janitor's office, utility room, storage room.
1960 - Gymnasium and gym. storage room have solid core wood door in pressed metal frames.
Solid core wood doors with tempered glass vision panels in pressed metal frames in the interior of vestibules and at corridor.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

C1020.03 Interior Fire Doors*

1954 - Boiler room has fire-rated hollow metal door in pressed steel frame.

Rating	Installed	Design Life	Updated
5 - Good	0	50	NOV-05

C1030.01 Visual Display Boards**

Chalkboards, whiteboards, and tackboards located throughout the school.

Rating	Installed	Design Life	Updated
5 - Good	0	10	NOV-05

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

Floor supported metal toilet partitions throughout.

Rating	Installed	Design Life	Updated
5 - Good	0	20	NOV-05

C1030.06 Handrails*

1960 - The stairs to the stage from gym. floor level have wall mounted steel handrails.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

C1030.08 Interior Identifying Devices*

Plastic signs in most areas.

Rating	Installed	Design Life	Updated
5 - Good	0	10	NOV-05

C1030.12 Storage Shelving*

1954, 1960 - Painted plywood shelvings in gym. storage rooms, utility room, janitor's office and storage room.

Rating	Installed	Design Life	Updated
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.

Rating	Installed	Design Life	Updated
5 - Good	0	20	NOV-05

C2010 Stair Construction*

1954 - Boiler room has a wood stair to the interior door and a concrete stair to the exterior door.
A wall mounted steel ladder in the boiler room to the roof access. A steel ladder mounted on the exterior wall of the gymnasium between the lower roof and the upper roof.
1960 - Wood stairs in a gym. storage room. Wood stairs to the stage from gym. floor level in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	NOV-05

C2020.05 Resilient Stair Finishes**

1960 - Resilient finish on stairs.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	NOV-05

C3010.01 Concrete Wall Finishes*

1954 - Painted concrete foundation wall in boiler room.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	NOV-05

C3010.01 Concrete Wall Finishes* Concrete Block

1960 - Painted concrete block walls in corridor, gymnasium and stage.

Rating	Installed	Design Life	Updated
5 - Good	0	100	NOV-05

C3010.02 Wall Paneling**

1960 - Metal panels on walls of the main entrance vestibule and corridor. Wall-mounted acoustic treatment panels in gymnasium. Wood panels on wall with stage opening in gymnasium. Vinyl covered panels on the exterior walls of the classrooms.
1954 - Wall-mounted acoustic treatment panels in the music room. Vinyl covered panels on the exterior walls of the classrooms.

Rating	Installed	Design Life	Updated
5 - Good	0	30	NOV-05

C3010.04 Gypsum Board Wall Finishes*

1954, 1960 - Painted gypsum boards in classrooms, administration areas, washrooms, corridor, storage rooms, custodian's office, utility room and boiler room.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	NOV-05

C3010.06 Tile Wall Finishes**

1954, 1960 - Ceramic wall tiles in boy's washrooms and girl's washrooms.

Rating	Installed	Design Life	Updated
5 - Good	0	50	NOV-05

C3010.09 Acoustical Wall Treatment**

1954, 1960 - Wall-mounted acoustic treatment panels in the gymnasium and in the music room.
1960 - Painted wood panels on wall with stage opening in gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	0	20	NOV-05

C3010.11 Interior Wall Painting**

1954, 1960 - Gypsum board, concrete, concrete block, metal panel and wood panel surfaces are painted. Some wall areas need re-painting.

Rating	Installed	Design Life	Updated
3 - Marginal	0	5	NOV-05

Event: Re-paint some wall areas.

Concern:
The paint on some walls are old and the colour faded away.

Recommendation:
Re-paint the walls of the staff room, custodian's office, utility room storage rooms and 5 classrooms (350 sq.m.).

Type	Year	Cost	Priority
Failure Replacement	2007	$2,675	High

Updated: February 1 2006

C3010.14 Other Wall Finishes** Metal Panel

1960 - Painted metal panels in main entrance vestibule and corridor.

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

C3020.01 Concrete Floor Finishes (Paint)*

1954 - Painted concrete floor finish in boiler room.

Rating	Installed	Design Life	Updated
5 - Good	0	75	NOV-05

C3020.02 Tile Floor Finishes**

1954, 1960 - Ceramic floor tiles in the small boy's washroom and in the small girl's washroom. Ceramic floor tiles around the urinals in the large boy's washroom. Vinyl floor tiles (300 mm x 300 mm) in vestibules, janitor's office, science classroom, administration areas, a portion of the corridor, men washroom and women washroom.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	NOV-05

Event: Replace all existing vinyl floor tiles (300 mm x 300 mm) with new sheet vinyl flooring.

Concern:

The existing vinyl floor tiles (300 mm x 300 mm) are old, worn out and lifting in some areas. People can trip and fall down. It requires frequent maintenance.

Recommendation:

Replace all existing vinyl floor tiles (300 mm x 300 mm) with new sheet vinyl (260 sq.m.) in main entrance vestibule, janitor's office, science classroom, administration areas, a portion of the corridor, men's washroom and women's washroom.

Type	Year	Cost	Priority
Failure Replacement	2007	$20,544	Medium

Updated: February 1 2006

C3020.04 Wood Flooring**

1960 - Wood flooring on the stage.

Rating	Installed	Design Life	Updated
5 - Good	0	25	NOV-05

C3020.07.02 Resilient Sheet Flooring

1954 - Sheet vinyl flooring in the boy's washroom and girl's washroom.

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

C3020.08 Carpet Flooring**

1954, 1960 - Carpet in corridor, classrooms, and library.

Rating	Installed	Design Life	Updated
3 - Marginal	0	10	NOV-05

Event: Repace the carpets with new sheet vinyl flooring.

Concern:
1954, 1960 - Carpets in the corridor and classrooms are old and worn out. It was installed in 1991.

Recommendation:
Replace the carpets in the corridor and classrooms with new sheet vinyl flooring (720 sq.m.).

Type	Year	Cost	Priority
Failure Replacement	2007	$56,710	Medium

Updated: February 1 2006

C3020.14 Other Floor Finishes**

1960 - Clay floor tiles in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	5	NOV-05

C3030.02 Ceiling Paneling (Wood)*

1954 - Wood ceiling panels in two classrooms at the north end of the 1954 original building.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	NOV-05

C3030.04 Gypsum Board Ceiling Finishes*

1956, 1960 - Painted gypsum board ceilings in gymnasium, boiler room, boy's washrooms, girl's washrooms, storage rooms, gym. storage rooms, men's washroom, women's washroom, janitor's office.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

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

1954 - Suspended T-Bar grid system with acoustic tiles in the music room.

Rating	Installed	Design Life	Updated
5 - Good	0	25	NOV-05

C3030.09 Other Ceiling Finishes*

1956, 1960 - Ceiling tiles (300 mm x 300 mm) in corridor, science classrooms, library, staff room, and 5 classrooms.

Rating	Installed	Design Life	Updated
3 - Marginal	0	10	NOV-05

Event: Paint the ceiling tiles (300 mm x 300 mm) in staff room and 3 classrooms.

Concern:
The ceiling tiles (300 mm x 300 mm) in the staff room and 3 classrooms are old and some have stains.

Recommendation:
Paint the ceiling tiles (300 mm x 300 mm) in the staff room and 3 classrooms (260 sq.m.).

Type	Year	Cost	Priority
Repair	2007	$4,548	Medium

Updated: February 1 2006

S4 MECHANICAL

D2010.01 Water Closets**

(1970) 20 lpf flush tank water closets are used in staff and student washrooms. Original water closets have round bowls with open front seats. Two water closets have been recently replaced with 6 lpf unit with round fronts, closed seat, and lids.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	NOV-05

Event: Replace Water Closets.

Concern:
Existing water closets use 20 litres of water per flush. New units operate effectively at 6 litres per flush. Water closets also do not meet current codes which require elongated bowls with open front seats in public washrooms.

Recommendation:
Replace 12 water closets with ultra-low flush models that include elongated bowls and open front seats.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2006	$7,704	Low

Updated: February 1 2006

D2010.02 Urinals**

(1970) Floor mounted urinals are used in boy's washrooms. Urinals have flush tanks that operate from motion sensors mounted on the ceiling.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D2010.03 Lavatories**

(1991) Stainless steel vanity mounted lavatories are used in all washrooms. Student washrooms have pushbutton mixing faucets. Staff washrooms have faucets with ribbed handles.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D2010.04 Sinks**

(1954/1960/1986) Stainless steel, single compartment sinks are provided in the staff room, arts and science room, and a number of the classrooms. These typically have swing spouts and ribbed or lever handles. The arts/science room sinks have sediment traps and island venting.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D2010.08 Drinking Fountains / Coolers**

(1960) Vitreous china non-refrigerated drinking fountains with double bubblers are located in the corridors.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D2010.09 Other Plumbing Fixtures**

(2005) A floor mounted janitor's sink has been installed in the south custodial closet.
(1960) A wall hunge janitors sink is provided in the north custodial closet.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D2020.01.01 Pipes and Tubes: Domestic Water*

(1954/1960) There is a combination of galvanized and copper domestic water piping.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	NOV-05

D2020.01.03 Piping Specialties (Backflow Preventors)**

(1998) Back flow prevention devices have been provided on make-up water to the boilers and glycol system.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D2020.02.06 Domestic Water Heaters**

(1992) There is a single John Wood JW402NA gas fired domestic water heater that provides heated domestic water for the entire school.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	NOV-05

D2020.03 Water Supply Insulation*: Domestic

(1992/1998) Domestic water piping in the boiler room and the crawl space is fully insulated except for the galvanized primary domestic cold water piping in the boiler room.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D2030.01 Waste and Vent Piping*

(1954/1960) There is a combination of cast and copper sanitary piping. Venting is copper.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

D2030.02 Waste Piping Specialties*

(1986) Sediment traps have been used in the art/science room sinks.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

D2040.01 Rain Water Drainage Piping Systems*

(1960) Gymnasium roof dains though exterior rain water leader, is collected below grade and directed to storm piping.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

D3010.02 Gas Supply Systems*

(1998) 50 mm medium pressure gas is regulated to low pressure and metered in the boiler room. 65mm welded steel pipe is used to distribute gas to appliances in the boiler room.

Rating	Installed	Design Life	Updated
5 - Good	0	50	NOV-05

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

(1998) Two Raypak model E1336-WTD natural gas boilers are used for builing heating. Each boiler has a two stage burner.

Rating	Installed	Design Life	Updated
5 - Good	0	30	NOV-05

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

(1998) Each boiler has a separate flue with a draft inducing fan. The fans have air proving switches that are tied into the boilers' safeties.
(1998) Combustion air duct terminates in an Eskimo trap at the floor. A unit heater is used to temper the incoming combustion air.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

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

(1998) Water treatment is provided on a regular basis. Side stream filters are provided around all pumps. Chemical pot feeder is provided on the heating water. A glycol feed system has been provided that includes a mixing tank and feed pumps.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D3040.01.01 Air Handling Units: Air Distribution**

(1954/1960) Two Trane Torivent units have been provided for ventilation. The first unit serves the classrooms, the second unit serves the gymnasium. Both units have had new heating coils installed in 1998 to allow them to operate with heating water or glycol.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D3040.01.04 Ducts: Air Distribution*

Low velocity supply air distribution ductwork runs in the corridor ceiling space. Retrn from the 1960 section runs in the crawl space.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	NOV-05

D3040.01.07 Air Outlets & Inlets:Air Distribution*

(1954/1960) Double deflection wall grilles are used to supply air into the classrooms, office, staffroom, library, and gymnasium.
(1954) Floor grille are provided for return air.
(1960) Door grille are provided in classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D3040.03.01 Hot Water Distribution Systems**

(1998) Each boiler has a dedicated Bell & Gosset 80-BF 2x7 vertical inline pump that circulates heating water (4.67lps @ 63 kPa) through the primary heating system. Two Bell & Gossett model 80-BF 2x9.5 (7lps @ 152 kPa) vertical inline secondary pumps are used in a lead/lag configuration to distribute scheduled heating water throughout the school. Heating piping is steel.
A B&G PL-45 glycol coil pump is used to circulate heated glycol from the heat exchanger through the gymnasium air handling unit heating coil.
A B&G NRF-22 hot water coil pump is used to circulate heated glycol from the heat exchanger through the classroom air handling unit heating coil.

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

D3040.03.01 Hot Water Distribution Systems**

(1998) Heating water distribution is run in the crawl space. Piping mains are steel. Some branch lines are run in copper. All piping is well hunge and insulated.

Rating	Installed	Design Life	Updated
5 - Good	0	40	NOV-05

D3040.04.01 Fans: Exhaust**

(1960) Roof mounted exhaust fan extract air from the gymnasium. Fan is interlocked with the gymnasium air handling unit's mixing dampers.
(2004) An in-line exhaust fan was installed exposed in the prep/server room. Theis operates from a cooling stat on the wall.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D3040.04.03 Ducts: Exhaust*

(1960) Gymnasium exhaust ductwork is run exposed at high level above the stage.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D3040.04.05 Air Outlets and Inlets: Exhaust*

Ceiling grilles provided in the washrooms.
Wall grilles provided in the gymnasium above the stage.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D3040.05 Heat Exchangers**

(1998) ITT shell and tube heat exchanger produces heated glycol from heating water.

Rating	Installed	Design Life	Updated
5 - Good	0	30	NOV-05

D3050.05.01 Convectors**

(1954) Original convection units in the boy's and girl's washrooms were converted for use with hot water heating system in 1998.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

D3050.05.03 Finned Tube Radiation**

(1998) Sloped top, 600mm high perimeter fin tube radiation is used for space heating throughout the school. Some classrooms have bare fin radiation built into the perimeter millwork. Sloped top and bottom cabinets mounted at approximately 3000 AFF are used in the gymnasium.

Rating	Installed	Design Life	Updated
5 - Good	0	40	NOV-05

D3050.05.06 Unit Heaters**

(1998) Engineered Air cabinet unit heaters have been provided at the entrances. A horizontal unit heater is used to temper the combustion air.

Rating	Installed	Design Life	Updated
5 - Good	0	30	NOV-05

D3060.02.02 Pneumatic Controls**

(1998) Quincy duplex controls compressor with a DeVilbiss refrigerated air dryer.

Rating	Installed	Design Life	Updated
6 - Excellent	0	40	NOV-05

D3060.02.03 Pneumatic and Electric Controls

(1998) Proportional pneumatic thermostats are provided in each classroom and other descrete spaces. Each thermostat has an occupancy override button. Line voltage thermostats cycle cabinet unit heater fans at entrances.

Rating	Installed	Design Life	Updated
5 - Good	0	40	NOV-05

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

(c2000) Barber Colman Network 8000 automated controls with a graphic user interface. Controllers and relay cabinets are located in the boiler.

Rating	Installed	Design Life	Updated
5 - Good	0	30	NOV-05

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Hand held fire extinguishers have been provided throught.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	NOV-05

S5 ELECTRICAL

D5010.01 Main Electrical Transformers**

Main service is upgraded from aerial service to pad mounted transformer, located at south corner of playground.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	NOV-05

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

300 Amp, 120/208 volt main service. Peak is 145 Amp. Main distribution equipment is 1950's vintage.

Rating	Installed	Design Life	Updated
2 - Poor	0	40	NOV-05

Event: Install new 400 amp new switchgear and disconnect c/w distribution panel.

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

Recommendation:
Install new 400 amp new switchgear and disconnect c/w distribution panel.

Type	Year	Cost	Priority
Failure Replacement	2006	$16,050	High

Updated: February 1 2006

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

1990's Combination of Square D and Federal pioneer panels at 80% capacity. 1950's panels are located in service rooms and Gym.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	NOV-05

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

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

Recommendation:
Install five new electrical panels in service rooms and gym.

Type	Year	Cost	Priority
Failure Replacement	2006	$12,840	High

Updated: February 1 2006

D5010.07.02 Motor Starters and Accessories**

2000 Siemens motor starters for boilers and fans. Barber-Coleman Network 8000 Microzone II energy management.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D5020.01 Electrical Branch Wiring*

1950's original wiring installed in conduit.

Rating	Installed	Design Life	Updated
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.

Type	Year	Cost	Priority
Failure Replacement	2006	$32,100	Medium

Updated: February 1 2006

D5020.02 Interior Lighting

1950's fluorescent light fixtures in hallways and classrooms.

Rating	Installed	Design Life	Updated
3 - Marginal	0	35	NOV-05

Event: Install new fluorescent light fixtures c/w T8 lamps and electronic ballasts.

Concern:
Lighting system is obsolete. Passed its expected life span. Ballasts may contain PCBs. High operating and maintenance costs.

Recommendation:
Install new fluorescent light fixtures c/w T8 lamps and electronic ballasts.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2006	$117,700	Medium

Updated: February 1 2006

D5020.02.01 Lighting Accessories (Lighting Controls)*

120 volt line voltage switching used for interior lighting systems in hallways, gym, classrooms and offices.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D5020.02.03 Emergency Lighting*

Ready-Lite Emergency lighting battery pack with remote heads.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D5020.02.03.03 Exit Signs

LED exit signs located at required locations.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

D5020.03 Exterior Building Lighting

Incandescent light fixtures located over exterior exits. One HPS wall pack located by play ground area. City owned light standards cover the playground area. Controlled by photocell.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	NOV-05

D5030.01 Detection and Fire Alarm**

Mirtone Fire Alarm panel with remote enunciator at main entrance. Bells and detection devices are located through out the school.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	NOV-05

Event: Replace fire alarm panel with new controller. Add new strobes in the school.

Concern:

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

Recommendation:

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

Type	Year	Cost	Priority
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.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	NOV-05

D5030.03 Clock and Program Systems**

Individual 120 volt clocks in hallways and classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	NOV-05

D5030.04.01 Telephone Systems**

Norstar telephone systems with three lines and handsets in classrooms.

Rating	Installed	Design Life	Updated
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.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	NOV-05

D5030.04.05 Local Area Network Systems*

Cat5 cables in conduit and free air in ceiling space.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	NOV-05

D5030.05 Public Address and Music Systems**

2000 Bogen Multicom 2000 with speakers in classrooms. Controls period bell tones. Sound system on stage not accessible.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	NOV-05

D5090.01 Uninterruptible Power Supply Systems**

APC 650 UPS for telephone system. APC 1500 UPS for computer server.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	NOV-05

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

Residential grade refrigerator, stove, and microwave oven in the staff room. Clear finish plywood desks are used for check out.

Rating	Installed	Design Life	Updated
5 - Good	0	25	NOV-05

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

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

Rating	Installed	Design Life	Updated
5 - Good	0	15	NOV-05

E2010.02.05 Educational Facility Casework*

1954, 1960 - Painted and plastic laminated plywood casework throughout classrooms. The classrooms need more casework.

Rating	Installed	Design Life	Updated
3 - Marginal	0	35	NOV-05

Event: Install additional casework to classrooms.

Concern:
The classrooms needs additional casework.

Recommendation:
Install additional casework to the classrooms (9 classrooms).

Type	Year	Cost	Priority
Program Functional Upgrade	2007	$32,100	High

Updated: February 1 2006

E2010.02.07 Kitchen Casework*

1954 - The staff room has the original painted and plastic laminated plywood kitchen casework which is in poor condition.

Rating	Installed	Design Life	Updated
2 - Poor	0	35	NOV-05

Event: Replace the kitchen casework in the staff room with new kitchen casework.

Concern:
The staff room has the original 1954 kitchen casework which is in poor condition. It has very small amount of storage space.

Recommendation:
Replace the existing kitchen casework with new casework (3.20 m.)

Type	Year	Cost	Priority
Failure Replacement	2007	$6,955	High

Updated: February 1 2006

E2010.02.08 Laboratory Casework*

Plastic laminated counter tops and desks.

Rating	Installed	Design Life	Updated
5 - Good	0	35	NOV-05

E2010.02.09 Library Casework*

Painted and clear finish plywood shelves. Plastic laminated wood desks are used for check out.

Rating	Installed	Design Life	Updated
5 - Good	0	35	NOV-05

E2010.03.01 Blinds**

1954, 1960 - Venetian blinds in the administration area and classrooms except those classrooms have drapes.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	NOV-05

E2010.03.06 Curtains and Drapes**

1954 - The science classroom, music classroom and two classrooms at the north end have drapes.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	NOV-05

F2020.01 Asbestos*

1954, 1960 - The latest hazardous materials audit was done in November, 2001. Asbestos is in the wrapping material for the cast iron pipe fittings in the crawl space.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

F2020.02 PCBs*

The school has not done any testing for PCBs.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance

It has barrier free route from the parking area and the bus drop off area to the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

K4010.02 Barrier Free Entrances

Install barrier free push paddles on the main entrance doors.

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

Event: There is no barrier free push paddles on entrance doors.

Concern:
It does not meet current code requirement.

Recommendation:
Install barrier free push paddles on the main entrance doors.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2007	$4,280	High

Updated: February 1 2006

K4010.03 Barrier Free Interior Circulation

Barrier access to all areas except to the stage.

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

Event: Install a wheel chair stair lift to the stage.

Concern:
There is no barrier free access to the stage.

Recommendation:
Install a wheel chair stair lift to the stage.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2008	$4,280	Medium

Updated: February 1 2006

K4010.04 Barrier Free Washrooms

There are barrier free washrooms for men & women.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

RECAPP Facility Evaluation Report

High Park Elementary School

S3148

Edmonton

Report run on: June 8, 2006 7:34 AM

Facility Details

Building Name: High Park Elementary Schoc
Address:
Location: Edmonton

Building Id: S3148
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: **$38,520**
5 year Facility Condition Index (FCI): **0%**

General Summary:

Major problem is with parking area, concrete pavement and concrete sidewalks, both need replacement. Re-pave the gravel roadway on the south side of the school with asphalt. Provide 10 additional parking stalls.
Pad mounted transformer located at south corner. Steel rail mounted car plug-ins. Perimeter lighting around school is incandescent and one metal halide light fixture.

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

G2010.02.01 Aggregate Roadway (Gravel)**

Roadway (gravel) on the south side of the school building is not in good condition.

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

Event: Re-pave the roadway (gravel) at the south side of the school building with asphalt.

Concern:
The roadway (gravel) at the south side of the school building is not in good condition. It has a lot of pot holes.

Recommendation:
Re-pave this roadway with asphalt (330 sq.m.).

Type	Year	Cost	Priority
Program Functional Upgrade	2007	$7,009	High

Updated: February 8 2006

G2010.05 Roadway Curbs and Gutters*

Concrete curbs and gutters at street sidewalks.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2020.02.01 Aggregate Parking Lots (Gravel)**

1960 - Staff Parking lot (gravel) in front of the west side of the building for 10 vehicles.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	NOV-05

Event: Relocate the parking lot. Increase the number of parking stalls to 20 from 10. Provide handicap-only stalls.

Concern:
Bus loading/unloading on street blocking staff parking lot. Congested condition on street during drop-off and pick-up times. 10 staff parking stalls. No visitor or handicap-only stalls.

Recommendation:
Install a new asphalt paved parking lot at a new location with a new access road from the street (730 sq.m.). Increase the parking stalls to a minimum of 20 for staff, visitors and the handicapped.

Type	Year	Cost	Priority
Lifecycle Replacement	2011	$58,850	High

Updated: February 8 2006

G2020.06.01 Traffic Barriers*

Duplex receptacles mounted on steel guard rails in front of the building in the staff parking lot.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2020.06.03 Parking Lot Signs*

Metal parking lot signs on steel posts.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2030.02.02 Asphalt Pedestrain Pavement**

1954, 1960 - Asphalt pedestrian pavement on the east side of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2030.04 Rigid Pedestrian Pavement (Concrete)**

1954 - Concrete sidewalks on the east, west and north sides of the building to the entrances. The concrete pavement on the east side of the building and the concrete sidewalk to the south entrance entrance on the west side of the building are not in good condition.
1960 - Concrete sidewalks on the west side and east side of the building to the entrances. The concrete sidewalk to the main entrance on the west side of the building is not in good condition.

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

Event: **1954 - Replace the concrete pavement on the east side of the building. Replace the concrete sidewalk at the south entrance on the west side of building.**
1960 - Replace the concrete sidewalk to the main entrance on the west side of the building.

Concern:
1954 - The concrete pavement on the east side of the building and the concrete sidewalk at the south entrance on the west side of the building are not in good condition.
1960 - The concrete sidewalk to the main entrance on the west side of the building is not in good condition.
People can trip and fall down.

Recommendation:
Replace the concrete pavement and concrete sidewalk at these locations (280 sq.m.).

Type	Year	Cost	Priority
Failure Replacement	2006	$38,520	High

Updated: February 8 2006

G2040.02 Fences and Gates**

A chain link fence at the south end of the building to separate the parking lot and concrete sidewalk from the gravel roadway.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2040.03 Athletic and Recreational Surfaces**

The asphalt paved areas on the east side of the building is used for play area. Children's playgrounds on the south side of the school in the park.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2040.05 Site and Street Furnishings*

Wood and concrete tables and benches.

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

G2040.06 Exterior Signs*

A large school name sign on the exterior wall at the main entrance. Two free standing wood signs on the west lawn at 154 Street.

Rating	Installed	Design Life	Updated
5 - Good	0	0	NOV-05

G2040.08 Flagpoles*

One flag pole on the west lawn at 154 Street.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2050.04 Lawns and Grasses*

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

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G2050.05 Trees, Plants and Ground Covers*

A few trees on the west lawn at 154 Street. A small strip of small plants and flowers between the concrete sidewalk and west side of the school at the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G3010.02 Site Domestic Water Distribution*

There is a 25 mm domestic water service that enters in the boiler room from the municipal service beneath 154 Street.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G3010.03 Site Fire Protection Water Distribution*

There are fire hydrants located on all sides of the property in close proximity to the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G3020.01 Sanitary Sewage Collection*

Sanitary is connected to the municipal service below 154 Street.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G3030.01 Storm Water Collection*

Storm water from the 1954 roof is collected in piping in the crawl space and is tied into the municipal storm service below 154 Street. Storm water from the 1960 roof ties into a catch basin in the playing field and is directed to the municipal main below 153 A Street. An addition catch basin to the north of the school connects to the storm main below 154 Street.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G3060.01 Gas Distribution*

Natural gas is supplied at medium pressure from the utility main beneath 110 Avenue.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G4010 Electrical Distribution

Pad mounted transformer located at south corner of school playground.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G4010.04 Car Plugs-ins*

10 car plug-ins mounted on horizontal steel railing.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05

G4020.01 Area Lighting*

Incandescent light fixtures located over exterior exits. One HPS wall mounted pack located by playground area. City owned light standards cover the playground area. Controlled by photocell.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	NOV-05