

RECAPP Facility Evaluation Report



Elmwood Elementary School

B3112A
Edmonton

Facility Details

Building Name: Elmwood Elementary School
Address: 16325 - 83 Avenue
Location: Edmonton

Building Id: B3112A
Gross Area (sq. m): 0.00
Replacement Cost: \$7,824,236
Construction Year: 0

Evaluation Details

Evaluation Company: Koliger Schmidt
Evaluation Date: December 1 2004
Evaluator Name: Mr. Mario Macchione

Total Maintenance Events Next 5 years: **\$433,728**
5 year Facility Condition Index (FCI): **5.54%**

General Summary:

Elmwood elementary school was built in 1960 and an addition complete in 1968. The total area of the facilities is 5024.3 m². One freestanding portable was relocated to this site from Lymburn in 2002 and is now located on the south side of the school. In 1993 the administration suit of rooms was modernized. In 2003 a modernization of the second floor (1960 building) for the Cogito Elementary Alternative Program was complete. Other changes have incorporated a change of location for the Dependent Handicapped Program, they are now located in the 1968 building and have constructed a "Snoezelen" room for it's occupants. The plans given to us by Alberta Infrastructure do not reflect 1993 modernization, the changes to 1968 classroom enclosed partitioned areas, nor the development of the Shelter areas.

The largest problem for Elmwood is structural. This problem needs to be addressed and steps need to be made to prevent further deterioration to the building. Before any of the interior finishes can be upgraded this structural review and possible solutions to prevent further movement need to be made.

Elmwood is in fair condition.

Structural Summary:

Elmwood's 1960 building is two storeys and is constructed of structural concrete posts and beam frame, masonry infill wall of double wythe concrete block, concrete slab on grade (main floor), precast concrete double T's (2nd floor) and a flat roof assembly. The 1968 building is a circular framed single storey building with wood framed exterior walls and glu laminated heavy timber Tee Pee style roof structure.

The main structural concern is the 1960 building's concrete slab on grade. On both levels of this building there has been shifting of interior walls and finishes. Cracking is apparent on exterior and interior walls and floors are sloped and slanted on both floors. A structural review of this building is in order to stabilize the moving slab. The present site contains clay and due to moisture cycles have heaved causing uplift forces throughout the building. This study and stabilization of soil and slab is required before any upgrading to the interior is done. The 1968 building is in good condition but the 1960 building is structurally in poor condition.

Envelope Summary:

Both buildings have aluminum framed windows and exterior storefronts. All roofs were redone in 1998 and there are some old signs of water penetration throughout the interior ceilings. These areas are badly stained and cannot easily be removed from ceiling. Drop ceilings should be installed in all areas that still have the 12x12 ceiling tiles. This not only allows for a cleaner appearance but also allows monitoring of new roof leaks. Winter conditions were present and no deficiencies were reported at time of report. Envelope appears to be in good condition.

Interior Summary:

1960 section of the school has painted gypsum and concrete block walls, VCT tile, carpet, 12x12 acoustical tile ceilings and a few staff rooms with drop ceilings.

The ceilings in most of the classrooms in this area have extensive staining and should install drop ceilings to allow for a cleaner look and for easier maintenance. The gym flooring is composed of clay tile and is in rough shape; needs to be replaced with a more suitable athletic wood floor. The slab movement has disturbed many interior items: bowed door frames, cracked walls and finishes, uplifting and sinking of flooring. Another major concern with slab movement is the blockage of the sewer line running down the main corridor. The uplifting force of the slab is putting stress on this already stressed pipe. As well a clean out in the staff lounge has been pushed up through the flooring finish and has cracked the tile. This slab must be stabilized before any interior upgrading takes place.

The interior is in poor condition only due to slab movement.

The 1968 section of the school has painted gypsum walls, VCT tile, carpet, 12x12 acoustical tile ceilings, painted gypsum and drop ceilings. The carpet in some of these area requires replacement while other areas require repair with future cost to replace.

The interior is in good condition.

Mechanical Summary:

The heating for the 1960 building is provided by a boiler and finned tube radiation. The heating for the 1968 building is provided by a boiler and reheat coils in the ventilation system. The ventilation for the entire building is provided by three air handling units, one serving the 1960 rooms, one serving the 1960 gym, and one serving the 1968 rooms.

The ventilation units for the 1960 building section should be upgraded complete with new ducting and diffusers. Both boilers should be replaced due to age and inefficiency. Pneumatic controls throughout the 1960 section are problematic and should be repaired. The main sanitary line has been scoped and could potentially break. Due to all the known heaving of the building this line should be replaced.

The mechanical systems are in poor condition.

Electrical Summary:

Main Service for this building is 500 Amp 120/208 volt three phase, with a peak demand of 200 Amp. Branch circuit panel boards are located throughout the facility. The lighting consists of T12 fluorescent light fixtures with some incandescent and HID light fixtures. Emergency lighting consists of battery packs c/w remote heads with energy efficient LED style exit lights throughout. The fire alarm system is Edwards 6632. Cat5 data network cabling is installed throughout. Telephone system is a Meridian - Nortel. Paging system is Bogen Multicom 2000. Main Service Switchgear requires upgrade. Upgrade Fire Alarm System by adding strobes. Replace existing lighting system with new T5 lighting system for energy efficiency and life cycle replacement. The electrical is in fair condition.

Rating Guide	
Condition Rating	Performance
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S1 STRUCTURAL

A1030 Slab on Grade*

1960 building- main floor

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	100	DEC-04

Event: Structural study.

Concern:

Heaving due to moisture cycle in high plastic clay.

Recommendation:

Structural study must be conducted to determine direct cause and possible solutions to movement problems.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2006	\$5,400	Medium

Updated: February 18 2005



B1010.01 Floor Structural Frame*(Building Frame)

1960 building - Concrete post and beam frame.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	100	DEC-04

Event: Repair beams

Concern:

Beams are cracking in areas of heaving slab.

Recommendation:

Repair cracks in beams. Coordinate with structural study.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$1,080	Medium

Updated: February 18 2005



B1010.09 Floor Construction Fireproofing*

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1010.10 Floor Construction Firestopping*

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1020.01.02.02 Precast Concrete:Roof Beams

1960 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1020.01.02.09 Glue-Lam. Construction: Roof Beams

1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1020.03.02 Precast Concrete: Roof Deck

1960 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1020.03.07 Wood Decking

1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1020.04.02 Precast Concrete: Canopies

1960 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

B1020.06 Roof Construction Fireproofing*

1960 and 1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	DEC-04

S2 ENVELOPE**B2010.01.02.01 Brick Masonry: Ext. Wall Skin***

1960 and 1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	DEC-04

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

1960 building- stairwells show signs of past repairs to cracked walls due to slab movement; Continue to monitor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	DEC-04

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

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

B2010.06 Exterior Louvers, Grilles, and Screens*

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

B2010.09 Exterior Soffits*

1960 and 1968 building- Prefinished metal and stucco.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

B2020.01.01.02 Aluminum Windows*

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	DEC-04

B2030.01.01 Aluminum-Framed Storefronts*

2002- 1960 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

B2030.01.05 All Glass Entrances and Storefronts*

2002- 1960 building- Aluminum framed fully glazed, main entrance; power assist doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	DEC-04

B2030.01.06 Automatic Entrance Doors*

1968 building- Metal doors and frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	DEC-04

B2030.02.01 Metal Doors and Frames

1960 and 1968 buildings- boiler room

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

B2030.05 Other Exterior Doors*

1960 building- Gym; metal frames and doors.

1968 building- Classrooms;metal frames and doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

B3010.04.05 Membrane Roofing (Single Ply, EPDM, PVC, TPO)*

1998- 1960 and 1968 buildings -Re-roofed and re-insulated with 2 ply torched membrane.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

B3010.09 Roof Specialties and Accessories*

1960 building- ladders.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

B3020.01 Skylights*

1968 building- Acrylic; over library built into tee-pee roof construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

B3020.02 Other Roofing Openings*

1968 building- Roof hatch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

1960 building- Concrete block and framed gypsum walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	50	DEC-04

Event: Repair damaged walls.

Concern:

Concrete block and gypsum walls shifted more than an 1" independently from concrete post and beam frame on both levels due to slab on grade problems.

Recommendation:

Repair walls once slab has been stabilized.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$64,800	Medium

Updated: February 18 2005



C1010.01.07 Framed Partitions (Wood Stud)

1968 building; gypsum board

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1010.02 Interior Demountable Partitions*

1960 building in Classroom 118.

1968 building- Classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

C1010.05 Interior Windows*

1960 building- Office area.

1968 building- Library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

C1010.06.02 Aluminum-Framed Storefronts

1960 building- Office area; into hallway

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1010.07 Interior Partition Firestopping*

1960 and 1968 building.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

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

Concern:

Unsealed penetrations (conduit and pipe) through ceiling and walls compromising fire separations.

Recommendation:

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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Repair	2006	\$4,320	Medium

Updated: February 18 2005

**C1020.01.07 Wood Doors**

1960 and 1968 building; wood frame, inset window.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace doors and frames.

Concern:

Doors and frames on both levels have been compressed by heaving concrete slab lifting corridor wall assembly into fixed concrete beams above.

Recommendation:

Repair and replace doors and frames that have been damaged once slab has been stabilized. (10 doors and frames)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$8,640	Low

Updated: February 18 2005



C1020.01.07 Wood Doors

1960 building -Girls and boys washrooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace door hardware**Concern:**

Hardware on doors are old and have a chain to reduce door opening.

Recommendation:

Replace hardware on girls and boys vestibule and entrance doors to washrooms. (4 doors)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$2,160	Low

Updated: February 18 2005

**C1020.02 Interior Entrance Doors***

1960 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	50	DEC-04

Event: Replace wood doors and frames.**Concern:**

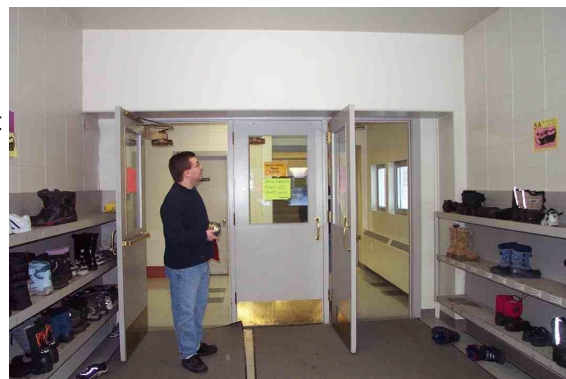
Interior entrance door assemblies are wood framed. The don't latch and have old hardware. Also due to the structural issues in this building the door frames have been compressed by heaving concrete slab lifting corridor wall assembly into fixed concrete beams above.

Recommendation:

Remove and install aluminum framed assembly with new doors and hardware (3 doors in each assembly; 3 assemblies in total). Replace once slab has been stabilized.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2006	\$32,400	Low

Updated: February 18 2005

**C1020.02.01 Aluminum-Framed Storefronts**

1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1020.02.05 All-Glass Entrances and Storefronts

2002- 1960 building- Aluminum framed fully glazed, main entrance; power assist doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

C1020.03 Interior Fire Doors*

1960 and 1968 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	DEC-04

Event: **Install hold open devices for doors.****Concern:**

1960 building- Doesn't have hold open devices.

1968 building- Doesn't have hold open devices

Recommendation:

1960 building- Install hold open devices for 2 doors

1968 building- Requires hold open devices for 2 doors.

(materials \$500, labour \$250 each door) Cost for Fire alarm panel interface and power supply \$1,000 per door assembly.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2006	\$5,400	Medium

Updated: February 18 2005**C1030.01.01 Chalkboards**

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: **Replace chalkboards with whiteboards.****Concern:**

Some children are allergic to chalk and also causes a mess with chalk residue on floors and walls.

Recommendation:

Replace 50 chalkboards with whiteboards. Repair walls as needed.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2006	\$43,200	Low

*Updated: February 18 2005***C1030.01.02 Markerboards**

1960 and 1968 building- Some classrooms and staff areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.01.03 Tackboards and Visual Aid Boards

1960 and 1968 building- Classrooms, staff areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.02 Fabricated Compartments(Toilets/Showers)*

1960 and 1968 building -Minor maintenance required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.06.01 Metal Handrails

1960 building- Stairwells

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.06.03 Wood Handrails

1960 building- Stage stairs.

1968 building- hallway up to library

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.08 Interior Identifying Devices*

1960 building- At main entrance and main office; school plan and fire exit plan.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.12 Storage Shelving*

19560 and 1968 buildings- Wood and metal shelving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.14 Toilet, Bath, and Laundry Accessories*

1960 and 1968 buildings

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

C2010 Stair Construction*

1960 building- stairwells; Concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	DEC-04

C2010.04 Wood Stair Construction

1960 building- stairs from gym up to stage.

1968 building- stairs from library to reading area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C2020.05 Resilient Stair Finishes*

1960 building- hallway stairs and stage stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

C2020.06 Carpet Stair Finishes*

1968 building- Library up to reading area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	DEC-04

C2020.08.04 Wood Framed Railings and Balustrades

1968 building- Library stairs up to reading area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C3010.03 Plaster Wall Finishes*

1968 building- Library reading room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

C3010.04 Gypsum Board Wall Finishes*

1960 and 1968 building; painted

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

C3010.06.01 Ceramic Tile

1960 and 1968 building- boys and girls washrooms.

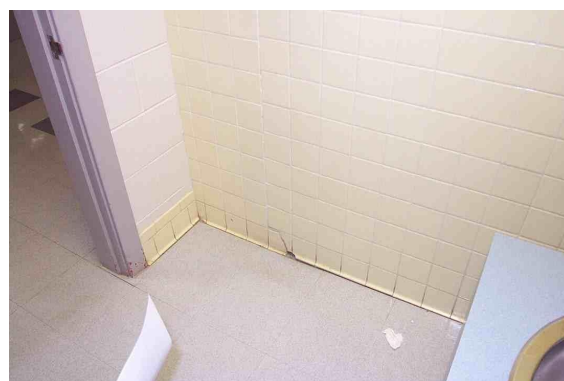
<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace tile**Concern:**

Tile in boys and girls washrooms on the lower and upper have sections of walls with existing yellow tile and other walls with new white tile. Mismatched color and cracking of tile due to structure movement is apparent on both floors.

Recommendation:

Replace tiles in boys and girls washrooms on the lower and upper floor with tiles that match the existing newer white ones. Replace once structure of building has been stabilized. (approx. 25m²)



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$4,320	Low

Updated: February 18 2005

C3010.09 Acoustical Wall Treatment*

1960 building- Gym

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

C3020.01 Concrete Floor Finishes*

1968 building- stairs from library to reading area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	DEC-04

C3020.02 Tile Floor Finishes*

1960 and 1968 buildings -well maintained.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

C3020.04 Wood Flooring*

1960 building- Stage flooring

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

C3020.07.01 Resilient Tile Flooring

1960 and 1968 buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C3020.08 Carpet Flooring*

1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	10	DEC-04

Event: Replace carpet**Concern:**

Carpet in areas is stained, fraying at seams and worn in high traffic areas.

Recommendation:

Replace carpet in areas where large stains have occurred (approx. 140m²), fraying carpet should be repaired.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2006	\$9,720	Low

Updated: February 18 2005

**Event: Replace carpet.****Concern:**

Library carpet due to its round floor area is hard to carpet and has many seams showing. Music room carpet is also an irregular arrangement for carpet, with large stairs and ramps. With high traffic these carpeted areas will wear out sooner than other applications.

Recommendation:

Replace carpet. (approx. 400m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2008	\$26,568	Low

Updated: February 18 2005



C3020.14 Other Floor Finishes*

1960 building- Gym

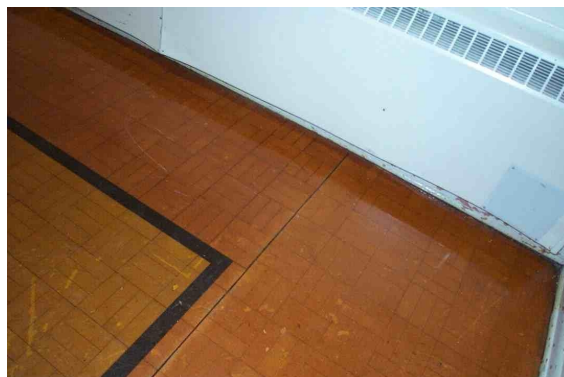
<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace gym flooring**Concern:**

Gym flooring is grandwood, floor has been worn down in areas and due to slab problems the flooring has sunken in both corners.

Recommendation:

Remove grandwood, repair and releve subflooring. (solution to sinkage will be incorporated in structural study) Install appropriate gym wood flooring, install proper court floor assemblies and paint athletic lines. (364.2 m²)



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$97,200	Low

Updated: February 18 2005

C3030.02 Ceiling Paneling (Wood)*

1968 building- music room, library and storage areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

C3030.04 Gypsum Board Ceiling Finishes*

1960 and 1968 buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

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

1960 building- Office and staff areas

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

C3030.09 Other Ceiling Finishes*

1960 and 1968 buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	DEC-04

Event: Install drop ceilings**Concern:**

12x12 ceiling tiles in classrooms are sagging, discolored, stained and some are coming loose.

Recommendation:

Install drop ceilings to all classrooms that have 12x12 ceiling tiles. (980m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$38,880	Medium

Updated: February 18 2005

**D1010.01.02 Hydraulic Passenger Elevators***

1960 building- Inspected yearly; transports people from main, stage area and second floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

S4 MECHANICAL

D2010.01 Water Closets*

Floor mounted, flush valve, open front seats water closets throughout most of school, several handicapped accessible. Some flush tank water closets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.02 Urinals*

Floor mounted urinals with automatic flush system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.03 Lavatories*

2004 - Majority of lavatories are stainless steel with single lever spout installed in millwork counters, some handicapped accessible. Some wall hung vitreous china lavatories in individual washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	30	DEC-04

D2010.04 Sinks*

Stainless steel sink with swing spouts in some classrooms, in kitchenettes, and in staff room. Elevated enameled steel janitor sinks with mixing tees and add on vacuum breakers. Built up tiled janitor sink with mixing tee.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.05 Showers*

2004 - Shower stalls with removable shower heads and temperature balancing valves for handicapped washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	30	DEC-04

D2010.08 Drinking Fountains / Coolers*

Vitreous china drinking fountains, non-refrigerated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

D2020.01.02 Valves: Domestic Water

Gate valves on domestic water mains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D2020.01.03 Piping Specialties (Backflow Preventors)*

Backflow preventor on main water line and boiler make-up water. Vacuum breaker on non-freeze hose bibbs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D2020.02.02 Plumbing Pumps: Domestic Water*

Inline domestic hot water recirculation pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

D2020.02.06 Domestic Water Heaters*

2000 - State SandBlaster domestic water heater with 31.6 kW input, 284 litre capacity for 1960 building. State SandBlaster domestic water heater with 17.1 kW input, 189 litre capacity for 1968 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

D2020.03 Water Supply Insulation*: Domestic

Domestic cold, hot, and recirculation water is insulated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D2030.01 Waste and Vent Piping*

Above ground plastic or copper. In crawl space it is cast or copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	50	DEC-04

Event: **Replace main sanitary line through 1960 building section.**

Concern:

Sanitary sewer line under main floor hall has been inspected with a pipe video camera. The pipe was reported as being in poor condition. Likely a result of structural heaving

Recommendation:

Dig up the main sanitary line and replace with new to prevent failure.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$108,000	Medium

Updated: February 17 2005

D2040.01 Rain Water Drainage Piping Systems*

1960, 1968 - Cast iron hub and spigot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

D2040.02.04 Roof Drains*

Roof drains with gravel guards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

D3010.02 Gas Supply Systems*

Gas distribution piping to heating boilers, domestic hot water heaters, and portable furnace.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

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

1960 - Weil McLain hot water boiler model J-29-W boiler with 764.3 kW output.

1968 - Beaver hot water boiler model BG2-2000 with 527.4 kW input and 421.9 kW output.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	DEC-04

Event: Replace 1960 hot water boiler.**Concern:**

Boiler is old and inefficient.

Recommendation:

Replace boiler and associated components with new copper tube boiler. See F2020.01

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$43,200	Low

Updated: February 17 2005

**Event: Replace 1968 hot water boiler.****Concern:**

Boiler is old and inefficient.

Recommendation:

Replace boiler and associated components with new copper tube boiler. See F2020.01

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$43,200	Low

Updated: February 17 2005

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

1960 - B-vent chimney. Combustion air is through exterior door louvre with a sliding door regulator.
 1968 - Metallic chimney. Combustion air is through exterior door louvre with a sliding door regulator.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: **Install proper combustion air systems.**

Concern:

Combustion air damper was closed during site visit. Possible incomplete combustion in boilers and domestic water heater.

Recommendation:

Install a permanant combuston air duct with eskimo trap and unit heater to temper incoming outdoor air for both boiler rooms.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$21,600	Low

Updated: February 17 2005

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

Chemical pot feeder installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.01.01 Air Handling Units: Air Distribution* 1960

1960 - Two constant volume air handling units with supply and return fan, mixing section with motorized dampers, pleated filter section and heating coil. One unit serves gym, the other unit serves rest of school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	DEC-04

Event: **Upgrade ventilaton for 1960 building.**

Concern:

There is insufficient ventilation in classrooms and gym.

Recommendation:

Install new air handling unit, ductwork and diffusers for 1960 classrooms. Install new air handling unit and ductwork for gym.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2007	\$270,000	Low

Updated: February 17 2005

D3040.01.01 Air Handling Units: Air Distribution* 1968

1968 - Constant volume air handling unit with supply and return fan, mixing section with motorized dampers and heating coil.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3040.01.04 Ducts: Air Distribution*

Medium velocity supply air ductwork. For action in 1960 section, see D3040.01.01.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

D3040.01.05 Duct Accessories: Air Distribution*

Balancing dampers installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Cone and grille diffusers throughout school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

D3040.03.01 Hot Water Distribution Systems*

Steel piping throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

D3040.04.01 Fans*: Exhaust

Exhaust fans washroom exhaust and old science room grille exhaust.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	DEC-04

Event: **Repair existing washroom exhaust fan for 1960 building.**

Concern:

Airflow for washrooms was very poor.

Recommendation:

Repair washroom exhaust fans.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$3,240	Low

Updated: February 17 2005

D3040.04.03 Ducts*: Exhaust

Low velocity exhaust air ductwork.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.04.05 Air Outlets and Inlets*: Exhaust

Single deflection grilles for exhaust.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3050.01.01 Computer Room Air Conditioning Units*

No air conditioning in computer lab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	DEC-04

Event: **Install air conditioning in computer lab.**

Concern:

Computer lab gets warm when fully occupied.

Recommendation:

Install 5 ton split system air conditioner for the one computer lab.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2007	\$19,440	Low

Updated: February 17 2005

D3050.02 Air Coils*

Reheat coils are installed in ductwork for 1968 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3050.05.02 Fan Coil Units*

Hot water force flows at entrances to school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3050.05.03 Finned Tube Radiation*

Finned tube radiation around perimeter of 1960 section of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3060.02.02 Pneumatic Controls*

Two pneumatic compressors, one for each 1960 and 1968 sections of the building. Pneumatic valves for perimeter fin and reheat coils. Pneumatic motors for dampers in air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	40	DEC-04

Event: **Repair hot water control valves.**

Concern:

Many rooms reported as too hot or too cold. Some thermostats are turned all the way down and still the room is still hot.

Recommendation:

Control valves require repair and thermostats re-adjusted.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$5,400	Low

Updated: February 17 2005

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC chemical fire extinguishers mounted on wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

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

Underground service from transformer located on south side of property. Original installation

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

D5010.03 Main Electrical Switchboards (Main Distribution)*

Original Switchgear by Dominion Electric Manufacturing Co.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	40	DEC-04

Event: Original Equipment. Service Size not identified on equipment. However, written documentation identifies it as 500 Amp, 120/208 Volt, three phase.

Concern:

Equipment has passed its expected life expectancy. Breakers may fail in case of an electrical fault. Spare parts are no longer available.

Recommendation:

Replace existing switchgear with new equipment. Evaluate requirement for service size upgrade.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2005	\$48,600	High

Updated: February 17 2005

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

Panels by Square D, Seimens and Federal Pioneer. Panels are at 70% capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5010.07 Motor Control Centers (Motor Control)*

Tory Anderson Energy Management System. No Spare Capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5010.07.02 Motor Starters and Accessories*

Individual Starters. Allen Bardelly, Canadian Controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5020.01 Electrical Branch Wiring*

Wiring is original, installed in conduit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

D5020.02 Interior Lighting

Wrap Around Surface and Recessed 2x4 fluorescent light fixtures c/w magnatic ballasts and T12 lamps. Acrylic lenses shield the lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	DEC-04

Event: Classrooms and Hallways use fluorescent light fixtures c/w T12 lamps and Acrylic lenses and magnatic ballasts.

Concern:

Existing light fixtures are at end of life. Acrylic lenses are yellowing in some areas. Existing light fixtures performance does not comply with IES recommendations for classrooms with VDT monitors. T12 technology c/w magnatic ballasts uses 75% more energy for a 2x4 light fixture c/w 4 lamps vs new 2x4 T5 light fixture c/w two lamps. Light levels in various areas are above new recommended light levels by IES for classroom environments.

Recommendation:

Upgrade lighting system in school with new light fixtures that utilize T5 lamps and electronic ballasts. Direct and indirect lighting should be utilized in classrooms with computers. Layout of the new lighting system shall be redesigned to comply with new layout of classrooms and computers. Payback will be within 5 year cycle.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2005	\$442,800	Medium

Updated: February 17 2005

D5020.02.01 Lighting Accessories (Lighting Controls)*

Original Line voltage switching used in classrooms. Keyed switches are used in hallways and bathrooms. Individual dimming controls used in stage lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	DEC-04

Event: Line voltage toggle switches are used to turn lights off. Keyed switches are used in common areas.

Concern:

Lights are left on without occupants in the area. Electrical energy is wasted. No master sweep to turn lights on or off at end or start of working hours.

Recommendation:

Install new Low Voltage relay system c/w programmable time clock for the various areas of the school c/w motion sensors in classrooms and washrooms.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2005	\$38,880	Low

Updated: February 17 2005

D5020.02.03 Emergency Lighting*

Wall mounted battery packs c/w remote heads located through the school. Exit signs, c/w LED lamps located at required exits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D5020.03 Exterior Building Lighting

HID and Incandescent light fixtures located around the exterior of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.01 Detection and Alarm Fire Alarm*

1987 installed- Edwards 6632 - 14 zones, 2 signal ccts. Annunciator at front Entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	DEC-04

Event: 1987 installed- Edwards 6632 Fire Alarm Panel.

Concern:

Fire Alarm Control Panel has life span of 20 yeras. Approaching end of life cycle. Panel does not have capacity to handle new strobes.

Recommendation:

Replace control panel with new Fire alarm control panel.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2007	\$10,800	Medium

Updated: February 17 2005

Event: Current fire alarm Bells do not have Strobes for the visual annunciation of the fire alarm signal in all areas.

Concern:

Hearing impaired occupants may be exposed to risk by not having proper notification of presence of an fire alarm signal.

Recommendation:

Install new strobes with current location of all bells. Total of 10 bells and strobes.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2005	\$8,640	High

Updated: February 17 2005

D5030.02.02 Intrusion Detection*

Motion detectors are located in common areas and where windows are located. Magnum Alert Security System.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.03 Clock and Program Systems*

Master Controller used for Bells only. Individual battery operated clocks are located in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.04.01 Telephone Systems*

Nortel Meridian telephone system c/w four outside lines and one fax line. Telephone c/w intercom feature.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.04.02 Paging Systems*

2002 installed- New Paging, Music System by Bogen Multicom 2000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	25	DEC-04

D5030.04.05 Local Area Network Systems*

2001 Installed. Cat5 data cabling, wired in conduit and free air and is located through out the school. Drops are in surface mounted conduit. Supernet is installed in school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5030.05 Public Address and Music Systems*

2002 installed - Paging system and music system is in working order. Manufactured by Bogen.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	0	DEC-04

D5030.06 Television Systems*

Cable TV is located in every classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5090.01 Uninterruptible Power Supply Systems*

Individual Stand alone UPS Backup APC 1000 installed in Server Room. Emergency Battery Packs installed through the school for emergency lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1020.02 Library Equipment***

1968 building- Metal shelved and carts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E1020.03 Theater and Stage Equipment*

1960 building- stage area- Props, curtains and costumes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E1020.07 Laboratory Equipment*

1960 building- Prep room still has equipment for science program but science room has been converted to an ANC art room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E1090.02.03 Bins

Located on south side of building in staff parking area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E1090.04 Residential Equipment*

1960 building- Staff kitchen: range, fridge, dishwasher, microwaves and coffee maker.
 Classroom 105 (backroom): fridge, stand up freezer, microwave and hot plate.
 Kindergarden room: range, fridge, dishwasher, microwaves, washer and dryer

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E1090.07.05 Gymnasium Equipment

1960 building- Mats, sports balls, hockey equip, cross country skies, volleyball nets and large play structure that rolls out from wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.02.05 Educational Facility Casework*

1960 and 1968 buildings- Older but well maintained; some minor areas of paint required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.02.07 Kitchen Casework*

1960 building- Staff and kindergarden room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.02.08 Laboratory Casework*

1960 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.02.09 Library Casework*

1968 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.02.11 Nurse Station Casework*

1960 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.03.01 Blinds*

1960 building- Staff work and lounge areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace blinds**Concern:**

Venetian blinds have been bent and broken.

Recommendation:

Replace blinds in staff room and staff work room with frosted window film. Roll down blinds are better suited for staff office areas. (4 roll down blinds)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$2,160	Low

Updated: February 18 2005**E2010.03.06 Curtains and Drapes***

1960 building- Gym has curtains for glass block upper wall feature.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F1010.02.04 Portable and Mobile Buildings 224

1990 construction, signage designates as portable 224.

Arch: Wood framed construction on concrete pads. Envelope consists of metal cladding, 2 ply SBS roofing membrane and aluminum framed windows with wire mesh security grilles. Interior components include carpet and VCT flooring, metal frames & doors, acoustical drop ceilings with painted gypsum board, painted millwork and chalkboards / whiteboards / tackboards.

Mech: Heating and ventilation provided by Lennox furnace model G8RQ3-105-2 with 30.8 kW input and 23.4 kW output. Programmable digital thermostat for control. The furnace comes with an outside wall intake louver for fresh air and supplies air along ductwork to grills in the millwork of the portable. The furnace has an economiser section for control of intake and return air.

Elec: Stand alone electrical panel, connected aurally to main building service. Exit signage and emergency battery packs installed. Wrap around light fixtures c/w T12 lamps. Rating of 4.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F1020.02 Special Purpose Rooms*

1968 building- "Snoezelen Room" is a room for handicapped children to learn to improve their senses. Features different kinds of lights, fiber optics, mats, mirrored walls and ball play area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F1020.02.01 Athletic Rooms

1960 and 1968 buildings- Gym equipment for handicapped use. Swings, balls and mats

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F2020.01 Asbestos*

1960 and 1968 buildings- Boiler room

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Investigate asbestos material.

Concern:

Insulation boiler room may contain asbestos.

Recommendation:

1960 and 1968 building -Determine degree of asbestos present in boiler and mechanical piping insulation.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2005	\$1,080	Low

Updated: February 18 2005

F2020.01 Asbestos*

1960 building- Storage room flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Investigate asbestos material.

Concern:

Tile flooring in storage rooms may contain asbestos.

Recommendation:

1960 building -Determine degree of asbestos present in VA tiles.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2005	\$1,080	Low

Updated: February 18 2005

F2020.09 Other Hazardous Materials*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

Facility Details**Building Name:** Elmwood Elementary School**Address:****Location:** Edmonton**Building Id:** S3112**Gross Area (sq. m):** 0.00**Replacement Cost:** \$0**Construction Year:** 0**Evaluation Details****Evaluation Company:****Evaluation Date:****Evaluator Name:****Total Maintenance Events Next 5 years:** **\$1,620****5 year Facility Condition Index (FCI):** **0%****General Summary:**

Architectural: The site is approximately 2.43 ha large. Site appears larger due to the adjoining Junior High school and community league sites. On site features include large playground and athletic field structures (baseball, basketball and soccer).

Staff parking and bus drop off was upgraded in 2001 and is located on the south side of Elmwood school well fenced from child interaction. The upgrade to the south parking has increased flow but peak times are still very busy along 83 ave.

Bike racks are also located on the south side of building, sheltered from main roads and in view of south facing school windows.

One issue of concern is vehicles can access south side tarmac from parking lot. Since this tarmac driveway is needed to be used for fire lane, bike and wheelchair access, installation of hinged bollards should be installed and appropriate signage is required.

All entrances are at grade allowing barrier free accessibility

The site is in good condition.

Mechanical: Water and gas lines run to utility mains. Sanitary sewer lines run to city mains. No storm sewer lines.

Electrical: Car receptacles are in good working order. Pad mounted transformer is in good condition. Exterior area lighting is adequately covered.

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)***

Winter conditions & snow coverage. No deficiencies reported.

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

G2010.05 Roadway Curbs and Gutters*

Winter conditions & snow coverage. No deficiencies reported.

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

G2020.02.02 Flexible Paving Parking Lots(Asphalt)*

2001- parking lot upgrade; located on south side of school.

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

G2020.05 Parking Lot Curbs and Gutters*

2001- parking lot upgrade, including curb cuts and ramps.

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

G2020.06.01 Traffic Barriers*

Staff parking to tarmac area.

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

Event: Install hinged bollards.**Concern:**

South side parking lot area has access to tarmac.

Recommendation:

Install 2 hinged bollards and appropriate signage to tarmac access.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$1,620	Low

Updated: February 17 2005

**G2020.06.02 Parking Bumpers***

Staff parking lot.

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

G2020.06.03 Parking Lot Signs*

Indicating location of staff parking area from 83 ave. Signs in parking lot for staff only parking stalls and bus drop off areas.

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

G2020.06.04 Pavement Markings*

Winter conditions & snow coverage. No deficiencies reported.

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

G2030.03 Pedestrian Unit Pavers*

Winter conditions & snow coverage. No deficiencies reported.

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

G2040.02 Fences and Gates*

Fencing surrounds field area and staff parking lot.

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

G2040.03 Athletic and Recreational Surfaces*

Winter conditions & snow coverage. No deficiencies reported.

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

G2040.04.01.04 Sports Goals and Equipment*

Soccer posts, basketball nets and baseball diamonds.

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

G2040.05.02 Tables

Picnic tables located on north side of building.

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

G2040.05.04 Bicycle Racks

Located on the south side of building near staff parking.

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

G2040.06 Exterior Signs*

1960 building- Sign mounted on building and another metal sign visible to traffic on 83 ave.

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

G2040.08 Flagpoles*

Attached to the side of the school near the main entrance.

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

G2050.04 Lawns and Grasses*

Winter conditions & snow coverage. No deficiencies reported.

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

G2050.05 Trees, Plants and Ground Covers*

Mature trees and some newer plantations and shrubs; In field area and in front area near main entrance.

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

G3010.02 Site Domestic Water Distribution*

Water line connected to city main.

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

G3010.03 Site Fire Protection Water Distribution*

Two fire hydrants in directly across from the school.

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

G3020.01 Sanitary Sewage Collection*

Sanitary sewer line connected to city main.

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

G3060.01 Gas Distribution*

Gas line runs out to utility main.

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

G4010.02 Electrical Power Distribution Lines*

Pad mounted transformer located on north side of the building. Power lines main and secondary are buried underground. Not accessible.

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

G4010.04 Car Plugs-ins*

Weatherproof, post mounted and wall mounted duplex receptacles are allocated as one duplex receptacle per each two stalls. Total of 16 energized stalls.

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

G4020.01 Area Lighting*

Parameter lighting is mounted to the side of the building.

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

S8 FUNCTIONAL ASSESSMENT

K1010 Site Location & Access

School is located on 163 street and 83 ave. Traffic congestion at peak times due to junior high school sharing same access streets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

K2010.01 Building Entrance/ Reception (location)

Main entrance is on the north side of school, reception is to the right in view of main corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.01 Barrier Free Route: Parking to Entrance

Staff parking on south side.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

K4010.02 Barrier Free Entrances

1960 and 1968 buildings- 2 power assist entrances one at both buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.03 Barrier Free Interior Circulation

1960 building- Passenger elevator allows for travel to every level (including stage)

1968 building-single level

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.04 Barrier Free Washrooms

1960 building- Both levels

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Install 2 power assist door hardware.

Concern:

Barrier free stalls are located on the second floor, but no power assist hardware for entrance into washroom.

Recommendation:

Install power assist hardware to 2 doors for the boys and girls washrooms. (electrical service to doors is \$850 each)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$8,640	Low

Updated: February 18 2005