

RECAPP Facility Evaluation Report



McNally Composite High School

B3215A
Edmonton

Facility Details

Building Name: McNally Composite High School
Address: 8440 - 105 Avenue
Location: Edmonton

Building Id: B3215A
Gross Area (sq. m): 0.00
Replacement Cost: \$20,933,552
Construction Year: 0

Evaluation Details

Evaluation Company: Alberta Infrastructure
Evaluation Date: December 1 2004
Evaluator Name: John Grassick

Total Maintenance Events Next 5 years: \$986,796
5 year Facility Condition Index (FCI): 4.71%

General Summary:

General Summary

Structural Summary:

McNally High School is a pre-cast concrete structure supported on footings. The structure of the school is generally in good condition, with an overall rating of 4.

There are some problems with cracking in various concrete block partition walls that are supported on the lower level slab on grade and cracking ceramic tile floor finish in the Boys change room. This distress is more cosmetic in nature and is associated with movement of the supporting slab resulting from changes in moisture content of the clay sub-grade. There is one zone where footing settlement appears to be occurring. The south stairshaft at the junction of the original east wing and the Academic Addition requires underpinning.

Envelope Summary:

Building exterior is in good condition overall, however the exterior door and hardware are in need of replacement/upgrading.

Interior Summary:

Building interior finishes are in fair condition, most being original to the time of construction. Corridor ceilings, Gymnasium acoustics and washroom upgrades require improvements within the near future.

Mechanical Summary:

Generally, the mechanical systems have not been upgraded since installed in 1963 and 1967. However, the systems are still operating and appear to be serviceable.

Further evaluations of the hot water boilers, the air handling units and the chiller system are recommended. The need to upgrade, replace or remove these systems may result from evaluation.

It's recommended that new glycol systems, new steam humidification systems and a new DDC building management system be installed.

Existing janitor sinks, circular wash fountains and several radiation cabinets are in need of replacement.

Electrical Summary:

Building systems are original and in good working condition. Upgrade lighting system to T8 and exit lights to LED style.

Rating Guide

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

S1 STRUCTURAL

A1010 Standard Foundations*

Cast-in-place concrete footings. Strip footings are used below walls and pad footings are used below columns and pilasters.

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

Event: Underpin Southcentral Stairshaft.

Concern:

There is foundation settlement occurring at the south central stairshaft that is part of the original building, at the junction with the 1967 Academic addition. Foundation settlement is occurring and further movement is probable.

Recommendation:

Underpin Southcentral Stairshaft and complete associated repairs to finishes.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$162,000	Medium

Updated: March 4 2005



A1030 Slab on Grade*

A five inch thick concrete slab reinforced with wire mesh is used throughout the building with the exception of the east portion of the 1967 Vocational Addition. In this section the system consists of a structural slab and beam system over a crawl space.

The slab on grade bears on a compacted granular subgrade.

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

A2020 Basement Walls*

The only area with a basement is the small mechanical room.

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

B1010.01 Floor Structural Frame*(Building Frame)

The building structural framing consists of precast concrete. Double tees comprise the floor structure, and loads are supported by precast columns or walls.

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

B1010.02 Structural Interior Walls Supporting Floors*

1962 and 1967 section. There is a considerable portion of the east part of the building that is two story. Supporting walls are concrete block. Minor cracking and shifting noted throughout the facility

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

B1010.03 Floor Decks, Slabs, and Toppings*

Double tee floors are topped with 2-1/2 inches of concrete topping. Cast-in-place concrete is used for the stair construction. Any cracking is generally cosmetic in nature and is associated with shrinkage, creep due to prestressing and other minor structural movements

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

B1010.07 Exterior Stairs*

Exterior stairs are cast-in-place concrete construction.

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

B1020.01 Roof Structural Frame*

The structural framing for the roof consists of either single or double precast concrete tees. There is no evidence of significant movement or distress.

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

B1020.04 Canopies*

The canopy construction at the main entry to the original 1963 construction is comprised of precast concrete double tees, precast beams and columns.

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

B1020.06 Roof Construction Fireproofing*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	100	DEC-04

S2 ENVELOPE**B2010.01.02.02 Concrete Block: Ext. Wall Skin***

South-facing wall of 1967 north extension.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	DEC-04

B2010.01.09 Expansion Control: Exterior Wall Skin*

Expansion control is accommodated by caulking between precast concrete panels and expansion joists between 1963 and 1967 portions of the building

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

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

There are caulk joints between all the precast panels as well as around all the windows

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

Event: Replace all failed caulk joints**Concern:**

Failed caulk joints between the precast panels and around windows provide a means for water and air entry in to the building.

Recommendation:

Remove and recaulk any failed or aging caulking between the precast wall panels and between the precast panels and windows.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2008	\$21,600	Low

Updated: March 4 2005

B2010.02.02 Precast Concrete: Ext. Wall Const.*

Deep profile precast concrete infill wall panels throughout the school

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

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

The exterior walls consist of 34mm of rigid insulation and plaster. The building is poorly air sealed compared to current standards. While there is an increased cost in the energy consumption of the building due to the air leakage and insulation, the materials themselves are very durable and therefore there are no health and safety concerns with the exterior wall construction.

<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*

1967 - Louvers to mechanical room

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

B2020.01.01.02 Aluminum Windows*

Windows are a black aluminum interior glazed frame with butyl seals both interior and exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	DEC-04

Event: Replace broken window South elevation, boys washroom**Concern:**

There is a broken window on the South elevation in the boys bathroom

Recommendation:

Replace the sealed unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$1,080	Medium

*Updated: March 4 2005***Event:** Replace the window systems with more efficient windows**Concern:**

The current window systems cannot be air sealed properly and are very inefficient compared to current glazing standards. These systems often have problems with drafts and over heating of interior spaces.

Recommendation:

Replace the current window systems with a new window system, with energy efficient glazing, properly tied into the precast wall system. This can reduce the energy consumption of the building as well as making the interior spaces more comfortable.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$302,400	Low

*Updated: March 4 2005***B2030.01.01 Aluminum-Framed Storefronts***

Confined to two-storey high stairwells in east 1967 addition.

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

B2030.01.10 Wood Entrance Door*

Wood entry doors in hollow metal frames at all entries.

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

Event: **Replace 15 wooden entry doors in 1963 section of buiding**

Concern:

Exterior wood doors are in marginal shape and doors do not seal correctly. Hardware has failed in some cases. Different hardware has been used based on year of install some not appropriate for barrier free access.

Recommendation:

Replace the 15 entrance doors and hardware.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$19,440	Low

Updated: March 4 2005

B2030.03 Large Exterior Special Doors*

Single 3.7 x 3.7 meter insulated overhead door into autoshop.

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

Event: **Door is in good condition, however door lift rails have been damaged and door does not seal to floor. Lower door seal is also damaged**

Concern:

Air infiltration in winter.

Recommendation:

Adjust door rails to allow proper closure and replace bottom seal

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$2,160	Low

Updated: March 4 2005

B2030.05 Other Exterior Doors*

Hollow metal exit doors near main gym and autoshop.

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

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

Approximately half of the roof area is original BUR.

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

Event: Replace the BUR roof areas**Concern:**

Due to snow cover at the time of the inspection, overall roof condition could not be accurately determined. Ponding was noted on much of the roof and the reduced snow cover likely indicates higher levels of heat loss compared to the newer SBS portion.

Recommendation:

Given the 40 year age of the roof replacement is likely need within the next 5 years

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2010	\$453,600	Low

Updated: March 4 2005

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)*

Half of the building has been re-roofed with an SBS roof membrane over 1963 and main gym

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

Event: Investigate the wrinkling of the membrane near the East connection between the 1963 and 1967 portion.**Concern:**

Some displacement of membrane was observed near the East connection between the 1963 and 1967 portions of the building. It appears as though this may be related to the structural deflections that are taking place.

Recommendation:

Examine the deficiency and determine if it is due to structural movement. If so, monitor the area until the structure is stabilized then repair of the membrane will likely be recommended.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2005	\$5,400	Low

Updated: March 4 2005

B3010.09 Roof Specialties and Accessories*

Gum boxes were used for mechanical penetration details

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	DEC-04

Event: Top up gum boxes**Concern:**

Low gum boxes trap water and over time will allow the water to penetrate into the interior of the building.

Recommendation:

Ensure that all gum boxes on the roof are full.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2005	\$540	Low

Updated: March 4 2005

B3010.11 Roof Covering Other*

The East 1967 addition was designed with no membrane or metal flashing over the precast parapets.

Preventative maintenance program clear roof of dirt and debris and fill gum boxes recommended.

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

B3020.01 Skylights*

Two acrylic skylights are installed in the second story roof on the North West corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	DEC-04

Event: Monitor skylights for leakage**Concern:**

The acrylic appears to be in reasonable condition, no fogging was noted. No leakage was noted at the time of inspection, however, water stains indicated previous problems.

Recommendation:

If leakage reoccurs then replacement with clerestory windows should be considered.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2008	\$1,080	Low

Updated: March 4 2005

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Interior fixed partions are concrete block that show minor cracking due to differential settlement.

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

C1010.03 Interior Operable Folding Panel Partitions*

2003 - Folding partion in west gym redone. Some damage to the finishing around the bulkhead but this does not appear to hinder the operation of the panels

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

C1010.04 Interior Balustrades and Screens, Interior Railings*

All interior railings are metal.

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

C1010.05 Interior Windows*

Interior windows exist between the 1963 and 1967 additons

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

C1020.02 Interior Entrance Doors*

Interior doors are solid core paint or urethane finished birch veneer with wire glass panels.

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

Event: Replace 80 of 310 doors per school supplied report

Concern:

Normal wear has damage approximately 30 % the doors.
Haardware is also worn out on a number of the doors

Recommendation:

Replace doors and hardware

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2006	\$82,080	Low

Updated: March 4 2005

C1020.03 Interior Fire Doors*

Hollow metal frames with wood doors containing wire mesh reinforced glazed panels. Wire glass panels surrounding doors. Minor cracking of wire embedded glass panels for store fronts next to stairwell in Stair 5 and due to foundation settling.

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

Event: **Check and repair binding doors caused by uneven settlement. Replace broken door closing hardware.**

Concern:

Fire separations and egress may be compromised.

Recommendation:

Repair or replace doors and hardware

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$6,480	Medium

Updated: March 4 2005

C1020.04 Interior Sliding and Folding Doors*

1963 section- used to split room 236 into two classrooms.

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

C1030.01 Visual Display Boards*

2002 - Chalk and white board, primarily whiteboards have been replaced

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

C1030.02 Fabricated Compartments(Toilets/Showers)-1963*

Metal toilet stalls in all washrooms

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

Event: **Repair damage locker room toilet partitons - 1963 section**

Concern:

Damaged and showing rust

Recommendation:

Repair or replace damage toilet partition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$7,776	Low

Updated: March 4 2005**C1030.02 Fabricated Compartments(Toilets/Showers)-1967***

Metal toilet stalls in all washrooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	DEC-04

Event: **Repair damage locker room toilet partions- 1967 section**

Concern:

Showing damage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$5,184	Low

*Updated: March 4 2005***C1030.06 Handrails***

Handrails are metal pipe construction

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

C1030.08 Interior Identifying Devices*

Interior signage and maps marking exits, fire alarms/ extinguisher and hose locations.

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

Event: Repair fire safety signage**Concern:**

Several fire exits signs were not lit and in some cases did not point to the exit. Fire hose cabinets were painted over and not re-signed.

Recommendation:

Repair and update signage throughout school

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$1,080	Medium

Updated: March 4 2005

**C1030.10 Lockers***

Student and staff lockers installed in shower rooms and corridor in 1963 and 1967

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	30	DEC-04

Event: Replace 1967 lockers in poor condition - 192 ft**Concern:**

Wear and damage to lockers

Recommendation:

Replace badly damaged lockers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2007	\$41,472	Low

Updated: March 4 2005

Event: Replace lockers in boys and girls locker rooms**Concern:**

Worn and damaged lockers in boys and girls dressing rooms and in corridor

Recommendation:

Replace approximately 407 lineal feet

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2006	\$93,960	Low

Updated: March 4 2005

C1030.12 Storage Shelving*

Storage shelving is the original plywood construction or wood composite construction replaced in 1996.

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

C1030.14 Toilet, Bath, and Laundry Accessories*

All fittings are surface mounted institution grade

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

C2010 Stair Construction*

All stairs are precast concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

C2020.01 Tile Stair Finishes*

Staircase to fitness centre in 1967 section

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

C2020.05 Resilient Stair Finishes*

Precast stairs finish with resilient stair tread with integral carborundum strip

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	20	DEC-04

Event: Replace worn stair treads on all exterior stairwells**Concern:**

Non-slip nosing worn or missing and resilient material lifting

Recommendation:

Replace nosing strips on 12 stair cases

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

Updated: March 4 2005

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

Steel railing and balustrades throughout.

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

C3010.01 Concrete Wall Finishes*

Exposed precast panels carry through to interior(all sections)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

C3010.03 Plaster Wall Finishes*

Above lockers in some areas

<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*

Gypsum board over some lockers and in some class rooms.

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

C3010.06 Tile Wall Finishes*

Mosaic tile in all washrooms

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

C3010.09 Acoustical Wall Treatment*

Fabric and wood accoustic panels in band room and drama room.

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

C3010.11 Interior Wall Painting*

Painted concrete block, plaster and gypsum board. Graffiti in a number of areas.

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

C3010.14 Other Wall Finishes*

Wood wall panels near admin area and around display cases. Clear urethane finish.

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

C3020.02 Tile Floor Finishes*

Various resilient tile finishes throughout the building.

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

Event: Replace 1967 - resilient tile 2100 m2 approx**Concern:**

Normal wear

Recommendation:

Replace floors in 8 classrooms, janitorial area, storage areas and corridors where badly worn and damaged-

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2008	\$78,300	Low

Updated: March 4 2005

Event: Resilient flooring - 1963 section -3200 m2**Concern:**

Normal wear. There is some cracking of floors due to settling at doorway.

Recommendation:

Replace resilient floor in 10 classrooms and some corridors where badly worn after the building foundation has been stabilized.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2007	\$125,280	Low

Updated: March 4 2005

C3020.03 Terrazzo Floor Finishes*

Terrazzo tile in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	70	DEC-04

C3020.04 Wood Flooring*

Wood floor in gym. Repaired and refinished in 2003

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

C3020.08 Carpet Flooring*

Carpet has been upgraded throughout the school in 2003 and is in good condition. Some snagging has caused damage to the carpets in the band rooms. This is an operational maintenance issue

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	10	DEC-04

C3020.11 Floor Painting

Lines on floor in main and small gymnasium

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

C3030.01 Concrete Ceiling Finishes*

Painted T and double T ceiling throughout majority of school

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

C3030.04 Gypsum Board Ceiling Finishes*

Hallway in some areas have plaster board ceiling

<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)*

A small number of rooms have suspended acoustic tile ceilings.

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

C3030.07 Interior Ceiling Painting*

Painting of underside of prefab concrete T and double T ceilings.

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

D1010.01.02 Hydraulic Passenger Elevators*

Single person elevator on north face of courtyard.

<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*

Flush valve type installed in student washrooms. Primarily flush tank type installed in staff washrooms. Majority of the fixtures and trim appear to be from the original 1963/67 construction.

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

D2010.02 Urinals*

Floor-mounted flush tank urinals. The flushing cycle is controlled by an occupancy sensor and timer controlled solenoid valve. The majority of the fixtures and trim appear to be from the original 1963/67 construction.

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

D2010.03 Lavatories*

There are a combination of porcelain and stainless steel lavatories located in the various washrooms throughout the school. The majority of the fixtures and trim appear to be from the original 1963/67 construction.

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

D2010.04 Janitor Sinks*

Enameled steel janitor sinks and trim appear to be from the original 1963/67 construction.

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

Event: Replace janitor sinks.

Concern:

Janitor sinks are chipped, stained, corroded, etc. Trim is generally in poor condition.

Recommendation:

Replace all 5 sinks and trim.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2005	\$10,800	Low

Updated: March 1 2005

D2010.04 Sinks*

A variety of stainless steel sinks are located throughout the school in science areas, vocational areas, office areas, etc.

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

D2010.05 Showers*

Shower rooms are provided in the Boys and Girls change rooms.

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

D2010.08 Drinking Fountains / Coolers*

Porcelain or stainless steel non-refrigerated drinking fountains are located throughout the school.

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

D2010.09 Other Plumbing Fixtures*

Circular wash fountains are located in the Boys and Girls change rooms.

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

Event: Replace circular wash fountains.

Concern:

Wash fountains are in poor condition.

Recommendation:

Replace the wash fountains.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2005	\$15,120	Low

Updated: March 1 2005

D2020.01.01 Pipes and Tubes: Domestic Water*

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

D2020.01.02 Valves: Domestic Water

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

D2020.01.03 Piping Specialties (Backflow Preventors)*

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

D2020.02.02 Plumbing Pumps: Domestic Water*

Domestic hot water circulating 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*

One State natural gas domestic water heater and two Raypak domestic water boilers (1998) are installed in the 1963 mechanical room. An A.O. Smith natural gas domestic water heater is installed in Mechanical Room 1-01.

<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

<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*

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

D2030.02 Waste Piping Specialties*

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

D2040.01 Rain Water Drainage Piping Systems*

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

D2040.02 Rain Water Drainage Specialties*

Several weeping tile sumps are located within the school.

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

D2040.02.04 Roof Drains*

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

D3010.02 Gas Supply Systems*

<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.*

Four sectional cast iron hot water boilers with an input of 4.4 mmbtuh each. Two installed in 1963 and two installed in 1967.

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

Event: Boiler's inspection.**Concern:**

Boilers have been in service for approximately 40 years. Externally the boilers appear to be in satisfactory condition. Condition of internals, burners, controls, etc. is not known. Efficiency of these boilers is low compared to newer boilers.

Recommendation:

Retain a mechanical engineering consultant to review the condition of the boilers and complete a life cycle evaluation of keeping these boilers vs. replacing with new, higher efficiency boilers. Suggest the consultant have a qualified heating contractor fully inspect the boilers, provide a written report of their condition and, determine a reasonable inspection schedule for the future.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2005	\$16,200	Low

Updated: March 1 2005

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

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

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

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

D3020.05 Auxiliary Equipment: Heat Generation*

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

D3030.06.01 Refrigeration Compressors*

A total of 150 Tons of cooling is installed for all areas served from the 1963 induction air system.

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

Event: Inspect refrigeration system.

Concern:

Cooling system was installed in 1963. It's not clear if the unit is still operational.

Recommendation:

Hire a qualified refrigeration contractor to inspect and report on the condition of the compressors and, the associated cooling coil and evaporative condenser. This may lead to additional work being required to repair or remove this system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2005	\$7,560	Low

Updated: March 1 2005

D3030.06.02 Refrigerant Condensing Units*

Evaporative condenser serving AHU-1's cooling system.

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

D3040.01.01 Air Handling Units: Air Distribution*

There are 5 constant volume air systems. One for each of the two gymnasiums and three induction air systems for the rest of the school. All air systems are from the original 1963/67 construction.

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

Event: Inspect air handling units.

Concern:

Air handling units are all approximately 40 years old and appear to require some cleaning and refurbishment.

Recommendation:

Hire a qualified mechanical contractor to internally inspect the five air handling units to determine and report on if they should be cleaned or, require some repairs/refurbishment.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2005	\$10,800	Low

Updated: March 1 2005

D3040.01.02 Fans: Air Distribution*

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

D3040.01.03 Air Cleaning Devices:Air Distribution*

Air handling units include single stage flat air filter sections.

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

D3040.01.04 Ducts: Air Distribution*

<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*

<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*

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

D3040.03.01 Hot Water Distribution Systems*

<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 serving washrooms, janitor rooms, industrial arts area, etc.

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

D3040.04.03 Ducts*: Exhaust

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

D3040.04.04 Ducts Accessories*: Exhaust

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

D3040.04.05 Air Outlets and Inlets*: Exhaust

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

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

Rooftop natural gas make-up air unit for the shops area.

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

D3050.02 Air Coils*

Heating coils are hot water coils.

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

Event: Glycol systems and coils.

Concern:

The existing heating coils in the air systems are hot water coils sized for an entering air temperature of 4C. To prevent the coils from freezing at temperatures below approximately -15C outside air volumes are likely being reduced below what is required to meet current standards.

Recommendation:

Install new glycol systems and heating coils for the five air handling units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2005	\$129,600	Low

Updated: March 1 2005

D3050.03 Humidifiers*

Humidification is not provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	DEC-04

Event: Install Humidification

Concern:

Humidification is not provided. Indoor humidity level will reach uncomfortable and unhealthy levels during the winter

Recommendation:

Install steam humidification

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2005	\$135,000	Medium

Updated: March 1 2005

D3050.05.02 Fan Coil Units*

Hot water force flow entrance heaters.

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

D3050.05.03 Finned Tube Radiation*

Hot water perimeter heating installed primarily in washrooms, corridors, janitor rooms, etc.

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

Event: **Replace radiation cabinets.**

Concern:

Radiation cabinets are in poor condition in several locations.

Recommendation:

Replace the existing cabinets.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$16,200	Low

Updated: March 1 2005

D3050.05.04 Induction Units*

Installed throughout for heating and ventilation.

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

D3050.05.06 Unit Heaters*

Primarily hot water unit heaters.

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

D3060.02.03 Pneumatic and Electric Controls*

Pneumatic and electric controls installed throughout appear to be from the original 1963/67 construction.

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

Event: **Install new DDC building management system.**

Concern:

Existing controls are beyond their service life, are obsolete, require increasing repairs/maintenance and, can only perform basic control functions.

Recommendation:

Install a new DDC building management system for all central systems.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2005	\$189,000	Low

Updated: March 1 2005

D4020 Standpipes*

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

D4030.01 Fire Extinguisher, Cabinets and Accessories*

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

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

City owned transformers in enclosed vault

<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)*

Main Panel FPE - 3000 amp, 120/208 volt, 3 phase, 4 wire, 100KA Interrupting capacity c/w 2000/3000 amp Main Breaker and breakers for Main PDC 1200/1600, Panel ID1 1200/1600, Panel ID2 800/1000. Electrical room is crowded with storage. Clear area should be maintained around main panel

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

D5010.03.05 Switchboards, Panelboards and Control Centers

Panel ID1 1000 amp, 120.208volt, 3 phase, 4 wire, FPE LDP c/w 11 breakers and 4 spaces

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

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

Typical panels are Square D QBL 442, double tub 42 circuit, 120/208 volt, 3 phase, 4 wire c/w bolt on breakers and some spaces. Some panels have low voltage switching sections c/w low voltage relays.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

D5010.07 Motor Control Centers (Motor Control)*

MCC in main mechanical room - Square D QMB, 120/208 volt, 3 phase, 4 wire, in two stacks c/w 1 size 2, 5 size 1 and 6 size 0 starters. One starter is damaged and needs repair.

MCC in secondary mechanical room - Canadian Controls Ltd 600 amp, 120/208 volt, 3 phase, 4 wire, 3 stacks c/w 14 Size 1, 1 size 1 1/2

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

Event: Repair Damaged Starter**Concern:**

Starter has minor damage

Recommendation:

Repair damage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$324	Medium

Updated: March 2 2005

D5010.07.02 Motor Starters and Accessories*

Grouped motor control for air handling system. Older GE Combination Starters. Some pilot lights and HOA's need replacement. Spare parts are available from central maintenance.

<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 mostly original except for new wiring to new computer rooms

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

D5020.02.01 Lighting Accessories (Lighting Controls)*

Some panels have low voltage control sections. Most lighting control in classrooms and corridors is low voltage control. Exterior lighting control is via photocell and timer.

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

D5020.02.02.01 Interior Incandescent Fixtures*

Some incandescent luminaries at entrances. Should be replaced with luminaries using compact fluorescent sources. Some theatrical lighting in drama room.

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

Event: Replace incandescent luminaries at entrances**Concern:**

Incandescent luminaries at entrances are either de-lamped or in poor condition.

Recommendation:

Replace with compact fluorescent luminaires

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

Updated: March 2 2005

D5020.02.02 Interior Florescent Fixtures*

Corridor luminaries in some areas have dropped opal lenses that have been retrofitted with angle brackets to retain lens. Main gym lit with T8 HO 2 lamp strips with wire guard, Secondary gym lit with 4 lamp T12 strips with wire guard, Washrooms lit with 2 lap T12 wraparounds, Mechanical rooms lit with 2 lamp T12 strips and wraparounds, North side classrooms lit with 6 transverse rows of 2 lamp wraparounds, Shops lit with twin turret industrial strips, Computer rooms lit with newer 4 lamp T8 parabolic. Dropped opal diffusers, and a some wraparound lenses are yellowed. Some luminaries missing diffusers. Some areas are over lit. The entire school needs a lighting upgrade to modern T8 technology. If a lighting upgrade is done many areas will need new ceiling tiles as well.

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

Event: Lighting Upgrade**Concern:**

Lighting system is old and in poor repair. Many luminaries are performing poorly due to yellowed or damage diffusers. Most lamps use old T12 technology and are not energy efficient. Some classrooms are over lit

Recommendation:

Upgrde existing fluorescent lighting to T8 lamps and ballasts and replace obsolete luminaires. Reduce lighting to IES recommendations in some areas.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2006	\$64,800	Low

Updated: March 2 2005

D5020.02.03 Emergency Lighting*

Distributed battery packs with "cubes" . Some in poor condition but most OK

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

Event: Repair emergency lights**Concern:**

Some emergency lights are in poor condition

Recommendation:

Replace defective luminres during major lightin upgrade

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

Updated: March 2 2005

D5020.02.03.03 Exit Signs

Exit signs are thin profile style that have been retrofitted with LED kits.

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

Event: Upgrade Exit Signs**Concern:**

Existing exit signs are old thin series with retrofit LED kits Sign brightnes is marginal.

Recommendation:

Replace with LED exit signs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2005	\$2,160	Unassigned

Updated: March 2 2005

D5020.03.01.01 Exterior Incandescent Fixtures*

Some exterior luminaries use R type lamps. Dropped opal luminaries at main entry need cleaning.

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

Event: Upgrade exterior lighting**Concern:**

Some lumianres at entrrences use R lamps and some use diffusers that do not keep dirt and bugs out

Recommendation:

Replace exterior lighting at entrances with energy effficeint luminaires

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2006	\$5,400	Unassigned

Updated: March 2 2005

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Exterior security lighting via parapet mounted floodlights. Parking Lot lighting is semi cutoff HPS on 25 ft poles owned and maintained by City

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

D5020.03.01.05 Other Exterior Fixturess*

Some miscellaneous wall brackets and pot lights

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

D5020.03.02 Lighting Accessories (Lighting Controls)*

Time clock and photocell control

<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*

2003 - New Notifier fire alarm c/w horns and strobes

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

D5030.02.01 Door Answering*

Doorbell is part of security system

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

D5030.02.02 Intrusion Detection*

Cantronic main panel, motion sensors in corridors and some classrooms, door contacts on most exterior doors.

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

D5030.02.04 Video Surveillance*

Head end uses dedicated Digital Sprite Lite micros with video track monitor, cameras in hallways and entrances, color monitor in main office on switcher.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

D5030.03 Clock and Program Systems*

Simplex 6100 Control Clock, wall clocks are Edwards 120 volt. Advance correction not working properly

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

D5030.04.01 Telephone Systems*

Meridian NS system, 12 lines 96 locals, console in main office, 5 modems for data lines, fed by APC ups.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

D5030.04.02 Paging Systems*

Rauland MCB 200 A program module, MPX1100A mixer, switch plate, cassette deck, mike in main office area, speaker boxes in corridors are all damaged but serviceable

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

D5030.04.04 Data Systems*

Mix of cat 5 and 5 e wiring, some to classrooms and office, most in dedicated computer rooms with central server room.

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

D5030.04.05 Local Area Network Systems*

Central Server room with 5 patch panels, 3 Hewlett Packard LAN switches, 4 servers and SuperNet service

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

D5030.06 Television Systems*

Triple Crown amp ID4200 with coax distribution to classrooms

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

D5090.02 Packaged Engine Generator Systems (Emergency Power System)*

Kohler 10 KW, 12.5KVA 120/208 volt air coppled generator set in main machanical room, Zenith 20 amp transfer switch, battery and charger feeds two FPE panels for emergency circuits

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

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

Standard library configuration with a mixture of original and updated shelving. Study carrels and tables located throughout

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

E1020.03 Theater and Stage Equipment*

Theatre room is setup with stage and lighting equipment

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

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Badminton, volleyball and basket ball equipment for two gymnasiums

<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*

(1995) Urethane finished birch or some original painted casework.

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

E2010.02.08 Laboratory Casework*

(1995) Urethane finished birch with lab sinks and acid resistant plastic top .

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

E2010.02.09 Library Casework*

(1995) Urethane finished birch or some original painted casework.

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

E2010.02.99 Other Casework*

(1995) Urethane finished birch shelving in storage areas and band room.

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

E2010.03.01 Blinds*

Horizontal Venetian blinds on south facing exterior rooms.

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

E2010.03.06 Curtains and Drapes*

Curtains in the band room and drama room

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

F2020.01 Asbestos*

Because of the age of the school, it is expected that asbestos is present but in an encapsulated or encased form.

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

F2020.02 PCBs*

Much of the existing lighting is T12 technology with magnetic balasts. This technology should be replaced as part of the normal program identified in the section D5020.

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

F2020.03 Mercury*

Present in thermostats and flourescent fixture. Dispose of as part of the maintenance and repair program.

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

F2020.04 Mould*

None detected

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

Facility Details

Building Name: McNally Composite High Sch
Address:
Location: Edmonton

Building Id: S3215
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: \$61,560
5 year Facility Condition Index (FCI): 0%

General Summary:

Site is in fair condition overall. Side walks and paving will require repair or replacement in the near future.

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)***

Asphalt roadway to receiving and staff parking (750 sq. M)

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

Event: **Asphalt roadway to receiving and staff parking (750 sq.M)**

Concern:

Asphalt roadway to receiving and staff parking (750 sq.M) has deteriorated from heavy traffic and use.

Recommendation:

Resurface with a 50 mm lift of new asphalt.

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

Updated: March 3 2005

G2010.05 Roadway Curbs and Gutters*Asphalt

Asphalt roadway and north side of staff parking has asphalt curbs.

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

Event: **Asphalt roadway has asphalt curbs on each side up to and including the north side of the staff parking (800 M)**

Concern:

Curbs have deteriorated and do not direct storm water properly

Recommendation:

Provide new curbs for roadway and north side of staff parking. (800 M)

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

Updated: March 3 2005

G2010.05 Roadway Curbs and Gutters*Concrete

Curbs are part of sidewalks at the front of the school and at the south side of the staff parking area. Repairs and replacement have been identified in G2030.04.

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

G2010.06 Roadway Appurtenances*

3 Meter wide Concrete approach to roadway.

<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)*

Replace 1900 sq. M with a 50 mm lift of asphalt.

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

Event: **Asphalt parking area has asphalt curbs on north and sidewalk curb on the south edges. (Area 1900 sq. M)**

Concern:

Asphalt pavement has deteriorated showing cracks and holes through out the parking area.

Recommendation:

Resurface with a 50 mm lift of new asphalt.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$21,600	Low

Updated: March 3 2005

G2020.06.02 Parking Bumpers*

Some precast concrete bumpers along the north parking area.

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

G2020.06.03 Parking Lot Signs*

There are no signs visible around the site or near the parking area.

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

Event: **Staff parking signage has been removed from their posts in three locations.**

Concern:

Designated parking areas and fire lane signage has been removed.

Recommendation:

Provide new signage as required.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2005	\$1,080	Low

Updated: March 3 2005

G2020.06.04 Pavement Markings*

No markings were visible.

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

Event: No pavement markings were visible.

Concern:

No pavement markings were visible to indicate where parking areas are.

Recommendation:

Provide new markings in parking areas.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2006	\$1,080	Low

Updated: March 3 2005

G2030.04 Rigid Pedestrian Pavement (Concrete)* Sidewalks

Concrete sidewalk areas at front of school are 5 Meters wide and are part of the curb system. The remainder around school are 1.5 m wide.

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

Event: Concrete side walk areas at front of school are 5 Meters wide and are part of the curb system. The remainder around school are 1.5 m wide.

Concern:

Sidewalks are cracked and are spalling at the edges and also very uneven at expansion joints in several locations.

Recommendation:

Cut curb edge along the street side at front of school and replace with new curb. Mud jack or remove and replace uneven slabs or those that are extremely deteriorated around the school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2005	\$21,600	Medium

Updated: March 3 2005

G2030.04 Rigid Pedestrian Pavement (Concrete)*Landings

Concrete landings at fire exits.

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

Event: **Concrete landings at fire exits are deteriorating and uneven.**

Concern:

Landings cracked and un even and create problems with door operation.

Recommendation:

Replace landings (100 sq. M)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2005	\$5,400	Medium

Updated: March 3 2005

G2040.02 Fences and Gates*

Chain linc fence around school yard. Iron pipe rail fence on both sides of driveway to parking area.

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

G2040.03 Athletic and Recreational Surfaces*

Base ball diamond, football and soccer fields are grass turf.

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

G2040.06 Exterior Signs*

Free standing sign at front with school with name at top and information area at the bottom.

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

G2040.08 Flagpoles*

Two flag poles on the roof.

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

G2040.11 Retaining Walls*

Small retaning wall at stair to courtyard area.

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

G2050.01 Irrigation Systems*

Hose bibs located approximatly every 60 meters around the school.

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

G2050.04 Lawns and Grasses*

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

G2050.05 Trees, Plants and Ground Covers*

Mature trees around the site.

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

Event: **Mature trees around the site.**

Concern:

Trees in the parking area need to be trimmed back.

Recommendation:

Trim trees that are leaning over the drive way in the parking areas.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2005	\$2,160	Low

Updated: March 3 2005

G3010.02 Site Domestic Water Distribution*

Domestic water is provided from the City's distribution system and metered within the school. No problems with this system were reported.

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

G3010.03 Site Fire Protection Water Distribution*

Water for fire protection is supplied through a combined domestic and fire water service line connected into the City's water distribution system. The water service line serves the site's fire hydrants and the school's fire hose cabinets. No problems or concerns were reported.

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

G3020.01 Sanitary Sewage Collection*

There are two sanitary building drains (150mm and 100mm) that connect into the City's sanitary collection system south of the school. No problems were reported.

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

G3030.01 Storm Water Collection*

Storm water is piped from the school through two building drains (300mm and 250mm) tying into a site collection system that includes several catch basins and man-holes that are piped to the City's storm water system. No problems were reported with this system.

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

G3060.01 Gas Distribution*

Natural gas is supplied from ATCO Gas' distribution system and metered/pressure regulated within the school's meter room. No problems or concerns with this system were reported.

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

G4010.02 Electrical Power Distribution Lines*

Underground Epcor electrical servicew to Epcor transformers in vault on NE side of central wing.

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

G4010.04 Car Plugs-ins*

Staff only parking receptacles in various locations (recepticals for 60 stalls)

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

G4020.01 Area Lighting*

Parking lot lighting is owned by the City and maintained by EPCOR

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

S8 FUNCTIONAL ASSESSMENT

K40 Current Code Issues

Hallways used as fire exists are also used for storage of lawnmowers and boxes.

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

K4010.01 Barrier Free Route: Parking to Entrance

Main doorway is wheelchair accessible

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

K4010.02 Barrier Free Entrances

No power assisted entry ways in school

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

Event: Add Power assiste entry to from door

Concern:

Wheelchair Access to building is impeded by lack of power door openers

Recommendation:

Install one set of power openers and hardware as part of replacing the front doors. Ensure appropriate opening is available.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$3,240	Medium

Updated: March 4 2005

K4010.03 Barrier Free Interior Circulation

Barrier free circulatio is in place with the exception of the small gym.

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

Event: Wheelchair Ramp to Small Gym

Concern:

Access to small gyn is impeded for wheelchair

Recommendation:

Install ramp with railing

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$1,080	Low

Updated: March 4 2005

K4010.04 Barrier Free Washrooms

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	DEC-04