

RECAPP Facility Evaluation Report

Edmonton School Dist #7



McCauley Elementary / Junior High School

B3209A
Edmonton

Facility Details

Building Name: McCauley Elementary / Junior High School
Address: 9538 - 107 Avenue
Location: Edmonton

Building Id: B3209A
Gross Area (sq. m): 4,669.80
Replacement Cost: \$6,765,505
Construction Year: 0

Evaluation Details

Evaluation Company: Koliger Schmidt Architect - Engineer
Evaluation Date: May 1 2004
Evaluator Name: Mr. Mario Macchione
Evaluator Phone: (780) 484-7447

Total Maintenance Events Next 5 years: **\$10,000**
5 year Facility Condition Index (FCI): **0.15%**

General Summary:

The main building at McCauley school was originally constructed in 1911. This building is a four storey structure with split level entrances. In 1961 a gymnasium addition was constructed.
 The 2002 upgrade focused mainly on interior renovations. These upgrades included: restructuring to improve access and circulation and replacement of the mechanical and electrical systems. Most existing interior surfaces were replaced and/or repainted. The exterior work focused on building skin appearance and envelope issues.
 The 1961 building was part of the above upgrade and was also renovated to serve the surrounding community by becoming a barrier free building. This building has also become the lunch and kitchen area, where the daily hot lunch program is served.
 The 1961 building is the only one onsite that can accommodate barrier free access. The historical nature of the 1911 building makes it difficult and costly to upgrade for barrier free travel. Any students who have physical disabilities are transferred to neighbouring schools.

Structural Summary:

The 1911 building is constructed of load bearing masonry, cast-in place concrete floors and a steel truss roof system with a wood deck. The new mechanical bottom plenum (northside of 1911 building) is constructed of load bearing masonry, cast-in place concrete floors and a metal deck. Top plenum is constructed of steel stud walls and steel stud roof framing.
 The 1961 building -The gymnasium is constructed of load bearing masonry, cast-in place concrete floors and glulam beams with a wood deck. The multipurpose area beside gym is constructed of load bearing masonry, cast-in place concrete floors, and open web steel joists with a metal deck.
 Structurally all buildings are in good condition.

Envelope Summary:

The 1911 and 1961 buildings have upgraded all exterior windows from openable wood framed units to PVC aluminum windows. Powerwash and repointing of brick and sandstone restored the buildings exterior appearance. Both building roofs were upgraded to modified bituminous membrane roofing (SBS).
 Both buildings are in very good condition.

Interior Summary:

The 1911 building interior has newly installed: flooring in all areas, suspended accoustical ceilings, wood and metal doors and millwork. In addition, all paintable surfaces have been newly painted throughout the school. Other major upgrades include: the basement mechanical room has been moved to allow for a central corridor and the renovations to the main floor administration including staff areas, offices, lounge, washrooms and "time-out" observation cubicals have increased functionality of space. Installing boys and girls washrooms on every floor (existing building had washrooms only in basement). Restoration of main corridor and entrances to reflect original construction. A sound proof music room with practice cubicals was constructed on the third floor for the school's special studies program.
 The 1961 building interior has new installed: flooring in all areas (including new maple flooring in gymnasium), accoustical ceilings, seating, and all existing paintable surfaces have been painted. Major renovations took place in the multipurpose area creating barrier free circulation and accessibility of food containers for the hot lunch programs. This building not only serves as a part of McCauley school but offers a place for the local communtiy to use as well.
 1911 and 1961 building -Some areas require firestopping where conduit penetrations are present, otherwise both buildings are in very good condition.

Mechanical Summary:

McCauley School's mechanical systems were entirely replaced during the 2002 renovation. The plumbing fixtures include flush tank and flush valve water closets, infrared lavatory systems and stainless steel lavatories. Stainless steel sinks are installed in a few classrooms, including the science room. The ventilation systems consists of one Air Handling Unit which serves the main building, and two roof top units, one serves the gym and one serves the multi-purpose space and gym storage. There are several roof top exhaust fans, which includes washroom, kiln, janitor room and fume hood exhausts. The heating is provided by two boilers which provide hot water to fin radiation and radiant panels around the perimeter of the building. There is also a water to glycol heat exchanger, from which the glycol feeds the heating coils in the ventilation units. Fire fighting equipment includes hose cabinets and fire extinguishers. All mechanical equipment is in good condition.

Electrical Summary:

The electrical systems for the entire facility was upgraded in 2002. Interior lighting is energy efficient and meets current IES requirements. Fire Alarm System is in compliance with current ABC 1997 code. All electrical systems are in excellent condition.

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

S1 STRUCTURAL**A1010.01 Wall Foundations (Continuous Footing)**

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

A1020.02 Bored / Augured Piles

2002 -1961 building -Cast-in place friction piles under multipurpose area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

A1020.07 Grade Beams

1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

A1030.02 Structural Slabs on Grade

2002 -1911 building -Basement mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

A2020.01.02 Masonry Units: Basement Wall

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1010.01.01.05 Structural Steel: Columns

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1010.02.03 Masonry Units:Structural Wall

2002- 1911 building -Repaired.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1010.02.05 Concrete Masonry Units:Structural Wall

2002- 1911 building -Existing walls repaired and new walls constructed.

2002- 1961 building -Existing walls repaired and new walls constructed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1010.03.01 Cast-in-place Concrete:Slab

1911 building

2002- 1961 building -Gym, storage and hallway areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1010.03.04 Concrete Topping

2002- 1961 building -Multipurpose and washroom areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

B1010.09 Floor Construction Fireproofing*

2002- 1911 building -Cementitious fireproofing installed on beams, metal deck and steel columns throughout floors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

B1010.10 Floor Construction Firestopping*

1911 building -Unsealed penetrations (conduit, pipe, raceway) through floors / walls / ceilings in electrical room 011, mechanical room 003, main floor communications room 118.

1961 building -Gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2	0	50	October 2004

Event: **Fill and seal the floor/wall/ceiling penetrations with firestopping material.**

Concern:

Unsealed penetrations (conduit, pipe, raceway) through floors, walls and ceilings, compromise the fire separations.

Recommendation:

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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Repair	2004	\$6,000	High

Updated: October 5 2004**B1020.01.02.09 Glue-Lam. Construction: Roof Beams**

1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1020.01.04.02 Steel Joists

2002- 1961 building -Open web steel joists in area attached to gym (multipurpose, washrooms, kitchen)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

B1020.03.05 Metal Deck

2002- 1911 building -Basement mechanical room.

2002- 1961 building -Multipurpose area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

B1020.03.07 Wood Decking

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B1020.04.05 Heavy Timber Construction: Canopies

2002- 1911 building -Repaired

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

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

2002- 1911 and 1961 building were power washed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	75	October 2004

B2010.01.03.07 Sandstone: Exterior Wall Skin

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B2010.01.06.03 Metal Siding*

2002- Mechanical intake top plenum -Metal cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

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

2002- 1911 and 1961 building -Repaired sandstone and brick.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	20	October 2004

B2010.03.01 Vapor Retarders: Exterior Wall

1911 building -Existing

2002- 1961 building -Peel and stick vapour barrier.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B2010.03.03 Building Insulation: Exterior Wall

1911 building -Existing

2002- 1961 building -Rigid insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B2010.05 Parapets*

2002- 1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

B2010.06 Exterior Louvers, Grilles, and Screens*

2002- Located on new mechanical intake top and bottom plenums.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

B2010.09.01 Finish Carpentry:(Plywood/ T&G)Soffits

2002-1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B2020.01.01.02 Aluminum Windows*

2002- 1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	35	October 2004

B2030.01.06 Automatic Entrance Doors*

2002- Vestibule 009 (connection between 1911 and 1961 building)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

B2030.01.10 Wood Entrance Door*

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	20	October 2004

B3010.01.02 Vapor Retarders

2002- All roofs

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

B3010.01.03 Roof and Deck Insulation

2002- 1961 building -multipurpose area, rigid insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)*

2002- 1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	25	October 2004

B3010.07 Sheet Metal Roofing*

2002- Mechanical intake top plenum -Metal cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

B3020.02.01 Roof Hatches

2002- 1911 and 1961 building -Access hatch and safety post, one on each building roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

2002- 1911 and 1961 building -Framed partitions (steel studs)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

C1010.01.03 Unit Masonry Assemblies

2002- 1911 and 1961 building -Concrete block, repaired existing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

C1010.06.03 Steel-Framed Storefronts

2002- 1911 building -Throughout building (classroom entrances, library, offices, computer room, etc.)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1020.01.01 Metal Doors and Frames

2002- 1911 building -Hollowed metal doors with pressed steel frames.

2002- 1961 building -Hollowed metal doors with pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

C1020.01.07 Wood Doors

2002- 1911 building -Throughout building, special fir wood door for main entrance into general office.

2002- 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1020.02.01 Aluminum-Framed Storefronts

2002- 1911 building -"Time out" rooms 103a & 103b have glazed aluminum doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1020.03 Interior Fire Doors*

2002- 1911 building -Kitchen 135 has a verticle rolling counter steel door.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

C1020.04 Interior Sliding and Folding Doors*

2002- 1911 building -Music room 306.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	25	October 2004

C1030.01.02 Markerboards

2002- 1911 and 1961 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1030.01.03 Tackboards and Visual Aid Boards

2002- 1911 and 1961 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1030.02 Fabricated Compartments(Toilets/Showers)*

2002- 1911 and 1961 building -With Kydex wall protection.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	20	October 2004

C1030.05 Wall and Corner Guards*

2002- 1911 and 1961 building -Vinyl acrylic alloy wall protective sheathing and corner guards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

C1030.06.01 Metal Handrails

2002- 1911 building -Metal pipe handrails in stairwells fastened to tile walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1030.10 Lockers*

2002- 1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

C1030.14.01 Toilet Accessories

2002- 1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C1030.14.02 Bath Accessories

2002- 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C2010.03 Metal Stair Construction

2002- 1911 building -Stairs to roof hatch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C2020.01 Tile Stair Finishes*

2002- 1911 building -Porcelain tile on basement stair landing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

C2020.02 Terrazzo Stair Finishes*

1911 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	50	October 2004

C2020.05 Resilient Stair Finishes*

2002- 1911 building -Vinyl composite tile on basement stair treads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	20	October 2004

C2020.08 Stair Railings and Balustrades*

1911 building - Stair railings are wood but the balustrades are metal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	50	October 2004

C2020.09 Stair Soffits

2002- 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C3010.03 Plaster Wall Finishes*

2002- 1911 and 1961 building -Column plaster repaired

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	40	October 2004

C3010.04 Gypsum Board Wall Finishes*

2002- 1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

C3010.06 Tile Wall Finishes*

2002- 1911 building -Porcelain tile in staircases.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

C3010.06.01 Ceramic Tile

2002- 1911 building -Washrooms, mop sinks in custodial rooms (008, 204, 303) and washing room 012.

2002- 1961 building -washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C3010.09 Acoustical Wall Treatment*

2002- 1911 building - Music room, fabric clad tackwall.
 2002- 1961 building -In gymnasium, Tectum wall panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

C3020.02 Tile Floor Finishes*

2002- 1911 building -Porcelain tiles in washrooms, custodial rooms, and wash-ups areas.
 2002- 1961 building -Porcelain tiles in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

C3020.03 Terrazzo Floor Finishes*

1911 building -Main floor corridor, stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	75	October 2004

C3020.04.06 Cushioned Wood Flooring Assemblies

2002- 1961 building -T & G maple gym floor

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C3020.07.02 Resilient Sheet Flooring

2002- 1911 building -Vinyl flooring in kitchen, classrooms, some washrooms, corridors (basement and 3rd flr), vestibules, library, custodial room (main and 3rd flr), entry, staff room and student activities area.
 2002- 1961 building -Vinyl flooring in kitchen, vestibules, multipurpose room and PE office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C3020.08.02 Sheet Carpet

2002- 1911 building -Staff areas and music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

C3030.04 Gypsum Board Ceiling Finishes*

2002- 1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

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

2002 -1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

C3030.09 Other Ceiling Finishes*

2002- 1961 building -Tectum panel ceiling (accoustical) in gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

S4 MECHANICAL

D2010.01 Water Closets*

2002 - Flush tank and flush valve water closets installed throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D2010.02 Urinals*

2002 - Urinals throughout installed throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D2010.03 Lavatories*

2002 - Lavatory system with infrared sensors for common washroom areas. Stainless steel lavs with trim installed in individual washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D2010.04 Sinks*

2002 Stainless steel sinks with trim in all classrooms, staff room, and in kitchen. Some sinks had fountain bubblers on them. Science room has stainless steel lab sinks with lab trim. Janitor sinks and trim installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D2010.05 Showers*

2002 - Two shower stalls installed in gym office and shower wash down area installed in basement laundry room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D2010.08 Drinking Fountains / Coolers*

2002 - Vitreous china drinking fountains installed throughout both building sections.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D2020.01.01 Pipes and Tubes: Domestic Water*

2002 - Copper piping and tubing installed throughout the two building sections.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

D2020.01.02 Valves: Domestic Water

2002 - Domestic water valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

D2020.01.03 Piping Specialties (Backflow Preventors)*

2002 - Reduced pressure backflow preventor installed on domestic water service and on hose cabinet water supply line in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D2020.02.02 Plumbing Pumps: Domestic Water*

2002 - Domestic hot water recirculation pump installed in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	20	October 2004

D2020.02.06 Domestic Water Heaters*

2002 - Domestic hot water heater installed in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	20	October 2004

D2030.01 Waste and Vent Piping*

2002 - Majority of waste and vent piping replaced throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

D2040.02 Rain Water Drainage Specialties*

2002 - A portion of roof and a sump pump connected to municipal combined storm and sewer system exterior to the building through a storm line installed for 1911 building.

The rest of the roof is connected to a second municipal combined storm and sewer system exterior to the building through a storm line installed for 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D2040.02.04 Roof Drains*

2002 - Roof drains with ballast guards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

D3010.02 Gas Supply Systems*

2002 - Gas meter and distribution system to gas fired equipment in the boiler room installed 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

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

2002 - Two Raypack Hi Delta hot water boilers installed in 1911 building. 1,739,000 Btu/h output each. Safeties are in place for pressure relief, low water cut-off, etc.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

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

2002 - Chimney and combustion air installed for hot water boilers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3040.01 Air Distribution Systems

Complaints of lack of air flow in one classroom in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3	0	30	October 2004

Event: Rebalance air to classroom.

Concern:

An occupant stated that one classroom was stuffy.

Recommendation:

Rebalance air to classroom.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2004	\$5,000	Low

Updated: October 5 2004

D3040.01 Air Distribution Systems

Excessively warm in communications closet in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3	0	30	October 2004

Event: Provide means of cooling to communications room.

Concern:

Excessively warm in communications closet.

Recommendation:

Provide more supply air to communications room to cool it.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2004	\$8,000	Medium

Updated: October 5 2004

D3040.01.01 Air Handling Units: Air Distribution*

2002 - Built-up air handling unit installed in mechanical room in 1911 building. AHU contains air blender, 2 pre-filter sections, a glycol heating coil and the centrifugal supply fan. A return fan section is on top of the unit.

Two roof top units installed for 1961 building, one for gym, one for multi-purpose space. Both units have supply and return fans, pre-filters, glycol heating coils and final filters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3040.01.02 Fans: Air Distribution*

2002 - Four ceiling fans installed in the gym built in 1961.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3040.01.04 Ducts: Air Distribution*

2002 - Ductwork and accessories installed throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

D3040.01.06 Air Terminal Units: Air Distribution*

2002 - Two reheat coils installed in rooms behind gym in 1961 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D3040.01.07 Air Outlets & Inlets: Air Distribution*

2002 - Grills and diffusers installed throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D3040.03.01 Hot Water Distribution Systems*

2002 - Hot water and glycol piping and valves installed throughout both building sections.

2002 - Six circulation pumps, two air separators and two expansion tanks installed in 1911 building for hot water and glycol systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	November 2004

D3040.04.01 Fans*: Exhaust

2002 - Rooftop exhaust fans installed for washrooms, kiln, and janitor rooms. One exhaust fan was also installed for fume hood in science lab preparation room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3040.04.03 Ducts*: Exhaust

2002 - Sheet metal exhaust ducts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D3040.04.05 Air Outlets and Inlets*: Exhaust

2002 - Grilles installed for exhausts throughout buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D3040.04.05 Air Outlets and Inlets*: Exhaust

2002 - Fume hood installed for science preparation room in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3	0	0	October 2004

Event: **Fume hood not labeled that it has been tested.**

Concern:

The fume hood in the science lab prep room should have a sash height sticker to indicate what level the sash should be at to function properly. This hood has to be tested regularly by code.

Recommendation:

Have fume hood tested, balanced, and labeled.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2004	\$1,000	N/A

Updated: October 5 2004

D3040.05 Heat Exchangers*

2002 - Tube and shell glycol to water heat exchanger intalled in the boiler room in 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3050.05.02 Fan Coil Units*

2002 - Hydronic force flows installed at the entrances to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3050.05.03 Finned Tube Radiation*

2002 - Fin tube radiantion and cabinets installed around perimeter of 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	35	October 2004

D3050.05.06 Unit Heaters*

2002 - Unit heaters installed in boiler room of 1911 building and in 1961 building in gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3050.05.08 Radiant Heating (Ceiling & Floor)*

2002 - Ceiling radiant panels installed in 1961 building around perimeter in multi-purpose area and gym storage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	35	October 2004

D3060.02.01 Electric and Electronic Controls*

2002 - Electronic dampers installed on main air handling unit in 1911 building. Line voltage thermostats control force flows and unit heaters throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D3060.02.02 Pneumatic Controls*

2002 - Air compressor and air dryer feed pneumatic field devices such as fin radiation valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

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

2002 - Energy management and control system installed 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	25	October 2004

D4030.01 Fire Extinguisher, Cabinets and Accessories*

2002 - Fire extinguishers throughout and fire hose cabinets installed throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

S5 ELECTRICAL**D5010.03 Main Electrical Switchboards (Main Distribution)***

2002 - Seimens Main distribution panel located in the basement electrical room. 400 Amps - 120/208 Volt, 3 phase, 4 wire, maximum demand (270 Amps). Adequate capacity and spaces available.

Overhead secondary service from an aerial mounted transformer located south west of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	40	October 2004

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

120/208 Volt, 3 phase, 2 wire branch circuit panels throughout school. Adequate capacity and spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	30	October 2004

D5010.07 Motor Control Centers (Motor Control)*

2002 - Seimens motor starters, located in mechanical rooms. Motor bank has two spare spaces for future starters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	25	October 2004

D5020.01 Electrical Branch Wiring*

2002 - General wiring devices and methods. Receptacles installed for required equipment in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	50	October 2004

D5020.02.01 Lighting Accessories (Lighting Controls)*

2002 - SPI Low Voltage Light Switching System is installed in the Gym. Line Voltage switching used in the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D5020.02.02.02 Interior Fluorescent Fixtures*

2002 - New Interior lighting is generally fluorescent. The main fixtures are 2 lamps, four foot c/w deep cell parabolics, surface, or suspended fixtures. Light fixtures has T8 lamps and electronic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D5020.02.02.05 Other Interior Fixtures*

2002 - Gymnasium light fixtures are 4'x3' fluorescent light fixture c/w 6 T8 lamps and electronic ballasts. Light fixture has Acrylic lens. Light fixtures do not have any wire guards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
1	0	0	October 2004

Event: Gymnasium Light fixtures Acrylic Lenses.**Concern:**

Acrylic Lenses on the Gymnasium 4'x3' light fixtures are loose and have fallen down. They are not protected by wire guards for the Gym activities and against vandalism.

Recommendation:

Replace Acrylic Lenses with Wire guards. Total of 20 units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2004	\$4,000	High

Updated: October 5 2004

**D5020.02.03 Emergency Lighting***

2002 - Emergency lighting systems c/w emergency battery packs are located through out the facility. Exit lighting and signage is LED type, 120 volt and is connected to Emergency Battery Packs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

2002 - HPS wall packs are located around the school. Adequate light levels for exterior lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

D5030.01 Detection and Alarm Fire Alarm*

2002 - Notifier AFP200 Fire Alarm Control Panel installed c/w annunciator. Fire Alarm Devices are located throughout the facility as required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	25	October 2004

D5030.02.02 Intrusion Detection*

2002 - Magnum Alert Intrusion Alarm Control Panel located in the basement main electrical room. Break glass detectors and motion sensors are located through out the school. Entry keypad located in the Boiler Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	25	October 2004

D5030.03 Clock and Program Systems*

Simplex master program clock located in the main floor staff work room. MPC controls class time changes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	20	October 2004

D5030.04 Voice and Data Systems

2002 - Three HP Procure Switch 2424M Switch panels, Cat 5E and the Telephone & Paging system equipment are all located in staff work room on the main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

D5030.04.01 Telephone Systems*

The telephone system is a Norstar Meridian System. Head-end equipment located in the staff work room on the main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	15	October 2004

D5030.04.02 Paging Systems*

2002 - Bogen System-Muticom 2000, located in electrical room. Handsets are located in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

D5030.04.04 Data Systems*

2002 - CAT5E data cabling installed in surface conduit and free air. Data outlets are supplied with surge protection power outlets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	15	October 2004

D5030.06 Television Systems*

2002 - Individual Television units c/w video and DVD players located in classrooms. Connected to Dracom TV Cabling network for school programs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1020.02.04 Book Depositories**

2002- 1911 building -Basement library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

E1020.03.04 Folding and Portable Stages

2002- 1961 building -Gymnasium

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

E1090.04.01 Residential Appliances

2002- 1911 and 1961 building -Staff kitchen and multipurpose kitchen areas contain dishwasher, fridge, microwave, stove, toaster, coffee maker and kettle.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

E1090.07.02 Backstops

2002- 1961 building -Motorized basketball backstops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

E1090.07.03 Gymnasium Dividers

2002- 1961 building -Fold-up curtain.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

E2010.02.03 Display Casework

2002- 1911 building -Main corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

E2010.03.01 Blinds*

2002- 1911 building -Roller shade blind system on all exterior windows and verticle louver blinds on all interior windows.
 2002- 1961 building -Roller shade blind system on all exterior windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	10	October 2004

E2020.04.04 Portable Seat and Table Assemblies

2002- 1961 building -Multipurpose area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

F2020 Hazardous Components Abatement

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	0	October 2004

S8 FUNCTIONAL ASSESSMENT**K3020 Indoor Environment**

1911 and 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

K4010.02 Barrier Free Entrances

2002- Vestibule entrance between 1911 and 1961 buildings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

K4010.03 Barrier Free Interior Circulation

1911 building -No barrier free access.

2002- 1961 building -Barrier free access.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

K4010.04 Barrier Free Washrooms

2002- 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

Facility Details**Building Name:** McCauley Elementary / Junior High School**Address:****Location:** Edmonton**Building Id:** S3209**Gross Area (sq. m):** 0.00**Replacement Cost:** \$0**Construction Year:** 0**Evaluation Details**

Evaluation Company: Koliger Schmidt Architect - Engineer

Evaluation Date: May 1 2004

Evaluator Name: Mr. Mario Macchione

Evaluator Phone: (780) 484-7447

Total Maintenance Events Next 5 years: **\$47,000****5 year Facility Condition Index (FCI):** **0%****General Summary:**

2002 upgrade included restoration of front landscaping to resemble original appearance, created an accessible facility entrance using a one-way driveway with extra visitor parking and a new location for staff parking hidden from main road (northside of building).

Some exterior upgrading was deleted due to budget concerns. These concerns are with the grass playing field and basketball asphalt court, both are in poor condition and require upgrading.

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)***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

G2010.05 Roadway Curbs and Gutters*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

G2020.02.02 Flexible Paving Parking Lots(Asphalt)*

2002- Front and back of 1961 building

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

G2020.05.02 Portland Cement Concrete Curbs and Gutters

2002 -Removed existing apron in front of 1911 building replaced with standard city curb.
2002 -Staff parking areas and one-way driveway

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

G2020.06.02 Parking Bumpers*

2002

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

G2020.06.04 Pavement Markings*

2002

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

G2030.04 Rigid Pedestrian Pavement (Concrete)*

2002 -Front landscaped area of 1911 building and back of 1961 building (new staff parking area) tied into existing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

G2030.06 Exterior Steps and Ramps*

2002 -1911 building entrance steps renovated.
2002 -Handicap ramp located in visitor parking lot towards building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

G2030.06.05 Metal Handrails and Railings

1911 building south face exterior stairs in need of metal handrails

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3	0	0	October 2004

Event: **Install handrails to exterior stairs**

Concern:

Neither of the front exterior stairs have any handrails.

Recommendation:

Install handrails to the front exterior stairs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2004	\$4,000	Medium

Updated: October 5 2004

G2040.02 Fences and Gates*

2002 -Fence constructed between new staff parking lot and basketball court, matches existing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

G2040.03 Athletic and Recreational Surfaces*

Paved basketball courts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2	0	0	October 2004

Event: **Repave**

Concern:

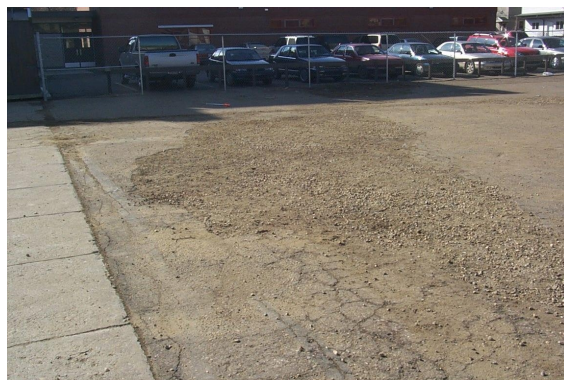
Pavement has cracks, holes and the surface has erroded.

Recommendation:

Repave. (1,600 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2004	\$35,000	Medium

Updated: October 5 2004

**G2040.06 Exterior Signs***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5	0	0	October 2004

G2050.04 Lawns and Grasses*

Playing field.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3	0	0	October 2004

Event: **Resod trouble areas.**

Concern:

Lack of grass and dead sod in field on north and east side of 1911 building.

Recommendation:

Sod areas as required. (2,000 m²)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2004	\$12,000	Medium

Updated: October 5 2004

**G3010.02 Site Domestic Water Distribution***

Four inch water supply line feeds 1911 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	0	October 2004

G3010.03 Site Fire Protection Water Distribution*

Fire hydrant near front of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	0	October 2004

G3030.02 Storm Water Equipment*

Two catchbasins on site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	0	October 2004

G3060.01.01 Natural Gas Distribution

Natural gas supply to building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	0	October 2004

G4010.04 Car Plugs-ins*

2002 - 26 energized new stalls plus existing wall mounted receptacles. Time controlled and temperature controlled operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6	0	0	October 2004

G4020.01 Area Lighting*

2002 - Exterior HPS wall packs located around the facility. Light levels are adequate.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4	0	0	October 2004