# **RECAPP Facility Evaluation Report**

Calgary RCSSD #1



# **Monsignor Neville Anderson School** B2719A

Calgary

# Calgary - Monsignor Neville Anderson School (B2719A)

# **Facility Details**

**Building Name:** Monsignor Neville Anderson

Address: 327 Sandarac Drive N. W.

Location: Calgary

Building Id: B2719A Gross Area (sq. m): 4,198.18 Replacement Cost: \$6,677.987

Construction Year: 0

## **Evaluation Details**

**Evaluation Company:** Neil Jaud Architect inc.

Evaluation Date: October 18 2006

Evaluator Name: Neil Jaud

Total Maintenance Events Next 5 years: \$92,100 5 year Facility Condition Index (FCI): 1.38%

#### **General Summary:**

Constructed in 1992 the single storey concrete masonry and wood truss roof school consists of 3 classroom pods surrounding a central library arranged in a cross plan. The administration offices share the ECS pod. The school has 12 classrooms and a gym. The building walls are clad in brick masonry veneer and pre-finished metal while the sloping roof is clad with concrete tiles. Good.

## **Structural Summary:**

Concrete grade beam on piles. Slab on grade floor. Concrete masonry bearing walls and steel beams supporting sloped and flat wood roof trusses. Good.

#### **Envelope Summary:**

Walls of brick masonry and waterproof membrane over rigid insulation on concrete masonry back-up wall. Concrete roof tiles over waterproof membrane on plywood sheathing and sloped wood trusses. SBS roofing on insulation on flat portions on roof trusses. Acceptable.

#### **Interior Summary:**

Sheet vinyl, VCT and carpet flooring, painted concrete masonry and gypsum board walls. Acoustic T-bar ceilings with gypsum board bulkheads. Gypsum board ceilings in storage rooms, Janitors rooms. Interiors painted in 2004. Raised roof areas at corridor ends provide clerestorey glazed light. Good.

## **Mechanical Summary:**

The heating is provided by by two hot water boilers, perimeter finned radiation, and reheat coils. Two air handling units provide ventilation to the building. The control system is DDC. A couple of spaces are pressurize likely due to a closed fire damper on a return air duct. Most timed push button lavatory trim do not have parts available and have been replaced with single lever trim.

The mechanical systems are in good condition.

## **Electrical Summary:**

The building has a 1200A 120/208V 3phase 4 wire electrical service that was installed in 1993. Panel boards are located throughout the school and have sufficient power and spaces for future circuits. There is an MCC for mechanical equipment. Interior lighting consists of energy inefficient T12 lamps in classrooms, corridors and offices. The gym has MH HID lights. Exterior lighting is HPS HID. There is no exterior lighting on the east and south sides of the facility. Emergency lighting is provided by means of battery packs with integral and remote quartz light heads. Energy inefficient incandescent exit lights are located throughout the facility and are connected to emergency power. The Fire Alarm system is an Edwards EST ESA 2000 with both audible and visual alarms installed throughout. Smoke detectors are located in the corridors with heat detectors in storage rooms. Cat 5 data cable is installed throughout.

Upgrades recommended: Upgrade the fluorescent lighting from T12 to T8; upgrade the exit lights to LED; add emergency lighting in gym and add exterior lighting.

The electrical systems are in good condition.

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# Calgary - Monsignor Neville Anderson School (B2719A)

Rating Guide			
<b>Condition Rating</b>	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\*

Concrete grade beam and piles

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

## A1030 Slab on Grade\*

Concrete slab on grade

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

## B1010.01 Floor Structural Frame\*(Building Frame)

Steel beams and steel and concrete columns supporting mezzanine floor in Library

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

## B1010.02 Structural Interior Walls Supporting Floors (or Roof)\*

Concrete masonry bearing walls with flush pilasters

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

#### B1010.03 Floor Decks, Slabs, and Toppings\*

Concrete topping on metal deck to Mechanical room

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

#### B1010.05 Mezzanine Construction\*

Steel beams and metal joists supporting metal deck

RatingInstalledDesign LifeUpdated4 - Acceptable199280JAN-07

## B1020.01 Roof Structural Frame\*

Concrete masonry bearing walls, steel beams and columns supporting wood roof trusses

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

# **B1020.06 Roof Construction Fireproofing\***

2 layers type"X" sheathing to underside of roof joists.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1992	50	JAN-07

# **S2 ENVELOPE**

## B2010.01.02.01 Brick Masonry: Ext. Wall Skin\*

Clay brick veneer over air space

RatingInstalledDesign LifeUpdated4 - Acceptable199275JAN-07

## B2010.01.06.03 Metal Siding\*\*

Pre-finished metal fascias and trim

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

## B2010.01.09 Expansion Control: Exterior Wall Skin\*

Control joints at regular spacing along exterior wall

RatingInstalledDesign LifeUpdated4 - Acceptable199275JAN-07

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

Window perimeter caulking. Some minor cracking at corners of windows.

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

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

Concrete masonry back-up wall to building perimeter

RatingInstalledDesign LifeUpdated4 - Acceptable1992100JAN-07

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

Waterproof membrane applied to concrete masonry with rigid insulation overlaid.

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

## B2010.06 Exterior Louvers, Grilles, and Screens\*

Clear anodized aluminum louvres

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

#### B2010.09 Exterior Soffits\*

Pre-finished metal soffits

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

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

Thermally broken aluminum frames and sealed twin glazing. Screened awning vents.

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

# B2030.01.02 Steel-Framed Storefronts\*\*

Painted, glazed hollow metal doors in pressed steel frames at Main entrance

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

# B2030.05 Other Exterior Doors\*\*

Painted hollow metal doors in pressed steel frames

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

# B3010.01 Deck Vapor Retarder and Insulation\*

Poly vapour barrier to underside of roof trusses. RSI 5.0 batt insulation.

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

#### B3010.02.02 Roofing Tiles\*\*

Concrete interlocking roof tiles

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

# B3010.04.04 Modified Bituminous Membrane Roofing (SBS)\*\*

SBS roofing on flat portion of roof

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# B3010.07 Sheet Metal Roofing\*\*

Pre-finished metal over gym exit door fascia

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

# B3020.01 Skylights\*\*

Clerestorey glazing to raised roof areas

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

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

Metal roof hatch and ladder

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

## S3 INTERIOR

## C1010.01 Interior Fixed Partitions\*

Concrete masonry and metal stud and Gypsum board

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

#### C1010.03 Interior Operable Folding Panel Partitions\*\*

Roll down, folding gym divider curtain

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

## C1010.04 Interior Balustrades and Screens, Interior Railings\*

Painted metal pipe railing and balustrade to Mechanical room access stair. Gypsum board on metal studs with glazed infill panels balustrade and railing with stained wood cap for Library stair.

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

## C1010.05 Interior Windows\* - Glass block

Glass block infill in walls between Library and corridor

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

## C1010.05 Interior Windows\* - glass in frame

Safety glazing in pressed steel frames

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

#### C1010.07 Interior Partition Firestopping\*

Taped gypsum board at gypsum board walls to gypsum board at underside of trusses. Firestop caulking at penetrations

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

#### C1020.01 Interior Swinging Doors\*\*

Stained wood doors in pressed steel frames

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

## C1020.03 Interior Fire Doors\*

Hollow metal doors in pressed steel frames. Labelled wood doors in pressed steel frames

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

#### C1020.03 Interior Fire Doors\* - rolling fire shutter

Rolling shutter to Reception counter at main entrance lobby.

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

# C1020.04 Interior Sliding and Folding Doors\*

Folding accordian door to staff coat closet

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# C1030.01 Visual Display Boards\*\*

Chalkboards, whiteboards, tackboards and pull down screens

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

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

Pre-finished metal toilet and shower partitions

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

#### C1030.06 Handrails\* - Library stair

Wall mounted metal handrail guide rail.

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

# C1030.08 Interior Identifying Devices\*

Plastic room numbers over doors

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

#### C1030.12 Storage Shelving\*

Stained wood shelving in classrooms, administration offices, staff room. Painted wood shelving in Janitors rooms. Metal storage shelving in storage rooms

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

# C1030.14 Toilet, Bath, and Laundry Accessories\*

Soap, towel and toilet paper dispensers. Waste receptacles

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

## C2020.06 Carpet Stair Finishes\*\*

Carpet on stair to Library mezzanine

RatingInstalledDesign LifeUpdated4 - Acceptable199210JAN-07

**Event:** Replace carpet

TypeYearCostPriorityLifecycle Replacement2010\$1,100Low

Updated: JAN-07

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

RatingInstalledDesign LifeUpdated4 - Acceptable050JAN-07

#### C3010.04 Gypsum Board Wall Finishes\*

Painted gypsum board

RatingInstalledDesign LifeUpdated4 - Acceptable200460JAN-07

# C3010.06 Tile Wall Finishes\*\*

Ceramic tile to washroom and change room walls

RatingInstalledDesign LifeUpdated4 - Acceptable199240JAN-07

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## C3010.09 Acoustical Wall Treatment\*\*

Wood slats on fabric

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

## C3010.11 Interior Wall Painting\*\*

Painted cncrete masonry and gypsum board. Painted metal door frames.

RatingInstalledDesign LifeUpdated5 - Good200410JAN-07

# C3020.01.02 Paint Concrete Floor Finishes\*\*

Painted Mechanical room floor and stair treads

RatingInstalledDesign LifeUpdated4 - Acceptable200410JAN-07

# C3020.04 Wood Flooring\*\*

Vented wood resilient gym floor

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

## C3020.07 Resilient Flooring\*\*

VCTile in storage rooms, janitors rooms

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

#### C3020.08 Carpet Flooring\*\*

Administration offices, classrooms, library

RatingInstalledDesign LifeUpdated4 - Acceptable199215JAN-07

**Event:** Replace carpet

TypeYearCostPriorityLifecycle Replacement2010\$65,000Low

Updated: JAN-07

## C3020.11 Floor Painting

Gym floor and games lines

RatingInstalledDesign LifeUpdated4 - Acceptable19925JAN-07

## C3030.04 Gypsum Board Ceiling Finishes\*

Corridor bulkheads, Janitors rooms, storage rooms Mechanical room, Washrooms

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

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

Suspended acoustic T-bar ceilings in administration offices, classrooms and corridors.

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# C3030.07 Interior Ceiling Painting\*\*

Painted gypsum board

RatingInstalledDesign LifeUpdated4 - Acceptable200420JAN-07

## C3030.09 Other Ceiling Finishes\*

Fabric covered acoustic panels in gymnasium

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

# D1010.02 Lifts\*\*

Library mezzanine lift at Mezzanine stair. Lift does not operate.

RatingInstalledDesign LifeUpdated2 - Poor199225JAN-07

**Event:** Replace lift

Concern:

Life does not operate, and computer lab at Mezzanine level

inaccessible

Recommendation:

Replace lift

**Consequences of Deferral:** 

Limited accessibility

TypeYearCostPriorityFailure Replacement2007\$25,000Medium

**Updated:** JAN-07

# **S4 MECHANICAL**

#### D2010.01 Water Closets\*\*

28 floor mounted, flush valve, open front seats.

6 Floor mounted, flush tank, open front seat for staff/separate wash rooms.

RatingInstalledDesign LifeUpdated5 - Good199235JAN-07

#### D2010.02 Urinals\*\*

6 wall hung urinals, with automatic timed flush tank system.

RatingInstalledDesign LifeUpdated5 - Good199235JAN-07

#### D2010.03 Lavatories\*\*

19 enameled steel lavatories in millwork with single lever faucets. Trim replaced in 1995. 5 wall hung vitreous china lavatories with single lever mixing tees.

RatingInstalledDesign LifeUpdated5 - Good199235JAN-07

# D2010.04 Sinks\*\*

12 Stainless steel sinks with swing spout in classrooms, kitchen and staff lounge.

2 floor mounted enameled steel custodial sinks with mixing tees and vacuum breaker.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

# D2010.04 Sinks\*\* - Laboratory

Laboratory sinks with swing spouts.

RatingInstalledDesign LifeUpdated3 - Marginal199230JAN-07

#### Event: Install vacuum breakers on lab sinks.

Concern:

No vacuum breakers on lab sinks.

**Recommendation:** 

Install 6 vacuum breakers.

Consequences of Deferral:

Possible backflow into water supply.

TypeYearCostPriorityCode Repair2008\$1,000Unassigned

Updated: JAN-07

#### D2010.05 Showers\*\*

Two shower stalls in gym change rooms, one for boys and one for girls.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

# D2010.08 Drinking Fountains / Coolers\*\*

5 fibre glass and one stainless steel non-refrigerated drinking fountains.

RatingInstalledDesign LifeUpdated5 - Good199235JAN-07

# D2020.01.01 Pipes and Tubes: Domestic Water\*

Copper piping.

RatingInstalledDesign LifeUpdated5 - Good199240JAN-07

# D2020.01.02 Valves: Domestic Water\*\*

Ball valves.

RatingInstalledDesign LifeUpdated5 - Good199240JAN-07

## D2020.01.03 Piping Specialties (Backflow Preventors)\*\*

Installed on two main domestic water branches, one for building and one for hose bibbs. Also installed boiler make-up water, and individual hose bibbs have vacuum breakers.

RatingInstalledDesign LifeUpdated5 - Good199220JAN-07

## D2020.02.02 Plumbing Pumps: Domestic Water\*\*

Inline domestic hot recirculation pump.

RatingInstalledDesign LifeUpdated5 - Good199220JAN-07

# D2020.02.06 Domestic Water Heaters\*\*

1A.O. Smith domestic water heater, Model: BT197H-860S, Input: 50.7 kW, Capacity: 379 litres.

Rating Installed Design Life Updated 5 - Good 1992 20 JAN-07

#### D2020.03 Water Supply Insulation: Domestic\*

Domestic cold, hot and recirculation water is insulated.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

#### D2030.01 Waste and Vent Piping\*

Cast iron or copper.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

# D2040.01 Rain Water Drainage Piping Systems\*

Cast iron.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

# D2040.02.04 Roof Drains\*\*

Full open flow roof drains with gravel guards installed on non-sloped areas of roof.

RatingInstalledDesign LifeUpdated5 - Good199240JAN-07

#### D3010.02 Gas Supply Systems\*

Gas distribution piping to heating boilers, domestic hot water heater, portable furnaces.

RatingInstalledDesign LifeUpdated5 - Good199260JAN-07

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

2 Superhot Boilers, Model: AAE-1800-N-M, Input: 527 kW.

RatingInstalledDesign LifeUpdated5 - Good199235JAN-07

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

Combined metal chimney up through roof. Combustion air duct runs down wall to draft trap.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

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

Chemical pot feeder.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## D3040.01.01 Air Handling Units: Air Distribution\*\* - AHU-2 Gym Unit

1 Engineered Air air handling unit, Model: LM-6-C, complete with supply fan, glycol heating coil, and filter section. Capacity: 2832 L/s.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

#### D3040.01.01 Air Handling Units: Air Distribution\*\* AHU-1 Main Building

1 Engineered Air air handling unit, Model: LM-26-C, complete with supply fan, glycol heating coil, filter section, mixing section with pneumatic actuators. Capacity: 12271 L/s.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

#### D3040.01.02 Fans: Air Distribution\*

Circular ceiling fans located in gym and high ceilings in corridor.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## D3040.01.04 Ducts: Air Distribution\*

Low velocity ductwork. Ceiling space used as return air plenum.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

#### D3040.01.07 Air Outlets & Inlets:Air Distribution\*

Square cone supply diffusers in dropped ceilings. Double deflection and bar supply grilles in some areas. Egg crate for return and exhaust.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## D3040.01.07 Air Outlets & Inlets:Air Distribution\* - Electrical Room

No air in electrical/data room. Room gets very warm.

Rating 2 - Poor 0 Design Life Updated JAN-07

## Event: Provide ventilation into electrical room

Concern:

Room gets very warm. Possible damage to data

switches/hubs.

Recommendation:

Install supply air duct with grille in electrical room. Install return

air with fire damper.

Consequences of Deferral:

Damage to data equipment.

TypeYearCostPriorityIndoor Air Quality Upgrade2007\$5,000Unassigned

**Updated: JAN-07** 

## D3040.03.01 Hot Water Distribution Systems\*\*

Steel supply system. 2 hot water pumps for perimeter heating, and 2 glycol pumps for heating coils in air handling units.

RatingInstalledDesign LifeUpdated5 - Good199240JAN-07

#### D3040.04.01 Fans: Exhaust\*\*

Cabinet exhaust fans for washrooms and general exhaust. Range hood exhausts for kitchen and staff lounge. Exhaust hood for Kiln heater.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

#### D3040.04.03 Ducts: Exhaust\*

Low velocity exhaust air ductwork to exhaust air outlets.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

## D3040.04.05 Air Outlets and Inlets: Exhaust\*

Egg crate exhaust air grilles throughout.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

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#### D3040.05 Heat Exchangers\*\*

Shell and tube heat exchanger for glycol for air handling unit coils.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## D3050.01.01 Computer Room Air Conditioning Units\*\*

Computer lab gets warm.

RatingInstalledDesign LifeUpdated3 - Marginal030JAN-07

# Event: Install computer lab A/C unit

Concern:

Computer lab gets warm when in use.

**Recommendation:** 

Install 5 ton air conditioning system.

Consequences of Deferral: Students get uncomfortable.

TypeYearCostPriorityIndoor Air Quality Upgrade2009\$25,000High

Updated: JAN-07

# D3050.02 Air Coils\*\*

Duct mounted hot water heating coils to temper air in some parts of the school.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## D3050.05.02 Fan Coil Units\*\*

8 force flows at entrances.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

# D3050.05.03 Finned Tube Radiation\*\*

Finned tube radiation around perimeter of school.

RatingInstalledDesign LifeUpdated5 - Good199240JAN-07

#### D3050.05.06 Unit Heaters\*\*

Unit heater in mechanical room.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## D3060.02.01 Electric and Electronic Controls\*\*

Line voltage controls for force flows and unit heaters.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

# D3060.02.02 Pneumatic Controls\*\*

Pneumatic compressor with dryer in mechanical room. Pneumatic control valves and actuators.

RatingInstalledDesign LifeUpdated5 - Good199240JAN-07

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

Johnson Metasys DDC system for monitoring and main equipment control.

RatingInstalledDesign LifeUpdated6 - Excellent200625JAN-07

## D4030.01 Fire Extinguisher, Cabinets and Accessories\*\*

ABC dry chemical fire extinguishers located throughout school.

RatingInstalledDesign LifeUpdated5 - Good199230JAN-07

## S5 ELECTRICAL

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

Siemens 1200A 120/208 3 phase 4W main switchboard fed underground from exterior 450kVA transformer with 3 sets of 4-500 MCM RW90 cables. The trip setting for the main 3P main circuit breaker is 800A. There is an integral CDP feeding a MCC and the power panels located throughout the school. There is a spare 400A circuit breaker and space for future equipment or panels. Switchboard has lightning arrestor/surge protection.

RatingInstalledDesign LifeUpdated5 - Good199340JAN-07

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

The panels are Siemens 42 circuit, 225A bus, 120/208V 3 phase 4W and are located throughout the school. Most have 150A feeds and have 25 - 50% spare capacity for future circuits. The panel for the parking receptacles are controlled by a contactor.

RatingInstalledDesign LifeUpdated5 - Good199330JAN-07

## D5010.07 Motor Control Centers (Motor Control)\*\*

The MCC is a Siemens 600A 120/208V 3 phase 3w unit (protected by a 300A circuit breaker in the main switchboard) controlling AHUs, compressors and pumps.

RatingInstalledDesign LifeUpdated5 - Good199330JAN-07

## D5010.07.02 Motor Starters and Accessories\*\*

Loose starters are combination magnetic and are located near the equipment they control. They are mostly Siemens manufacture. Safety switches are Siemens.

RatingInstalledDesign LifeUpdated4 - Acceptable199330JAN-07

#### D5020.01 Electrical Branch Wiring\*

The electrical branch wiring is original to the school. There are sufficient outlets in each classroom and in the corridors. GFI receptacles are used when outlets are near sinks(e.g. In science room). There is a kitchen area in the staff room with microwave ovens, range, full size fridge and a dishwasher.

RatingInstalledDesign LifeUpdated5 - Good199350JAN-07

#### D5020.02.01 Lighting Accessories (Lighting Controls)\*

Offices and classrooms have toggle type switches while the general areas (corridors and washrooms) have key switches. The gym light fixtures are key type.

RatingInstalledDesign LifeUpdated5 - Good199330JAN-07

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#### D5020.02.02.02 Interior Florescent Fixtures\*\*

Fluorescent light fixtures are T12 lamps with magnetic ballasts except for 2 portable classrooms which have T8 lamps. Light levels in the classrooms and gym acceptable. There is a combination of t-bar recessed light fixtures and surface mounted light fixtures throughout the school. There are also some compact fluorescent accent downlight fixtures in the entrance and library. Fluorescent luminaires augment the HID lights in the gym. The office area has parabolic lens.

RatingInstalledDesign LifeUpdated4 - Acceptable199330JAN-07

# Event: Replace T12 lamps with T8

#### Concern:

Existing T12 lamps with magnetic ballasts are energy inefficient and the lighting industry is moving towards discontinuing the T12 type

## Recommendation:

Replace the T12 fluorescents with energy efficient T8 lamps with electronic ballasts

#### **Consequences of Deferral:**

Higher than necessary electrical energy payments and maintenance

TypeYearCostPriorityEnergy Efficiency Upgrade2008\$80,000High

**Updated:** JAN-07

#### D5020.02.02.03 Interior Metal Halide Fixture\*

18 - 400W MH HID pendant mounted light fixtures with integral ballasts are installed in the gym. 11- 400W MH HID luminaires are located in the library with remote mounted ballasts in a nearby storage room. These should be removed as they are not used and are difficult to keep clean. The lighting level is adequate without them.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1993	30	JAN-07

## D5020.02.03.02 Emergency Lighting Battery Packs\*\*

Emergency lighting is provided by 12V Ready Lite battery packs with 12W quartz remote heads. They are mounted on both ceilings and walls and are located throughout the school in corridors and washrooms. The units in the gym are protected with wire guards, however there are insufficient number to meet Code requirements.

RatingInstalledDesign LifeUpdated4 - Acceptable199320JAN-07

## Event: Add emergency lighting in gym

Concern:

Insufficient emergency lighting in gym. Does not meet Code requirements

**Recommendation:** 

Add emergency lighting in gym.

Consequences of Deferral:

Continued Code violation. Insufficient emergency lighting for egress upon power failure.

TypeYearCostPriorityCode Upgrade2006\$2,000Unassigned

Updated: JAN-07

## D5020.02.03.03 Exit Signs\*

Exit signs are Ready Lite, white, thin profile, steel frame, 13W incandescent type and connected to the emergency lighting battery packs. Exit signs in the gym are protected with wire guards

RatingInstalledDesign LifeUpdated4 - Acceptable199330JAN-07

## Event: Replace exit light lamps with LED type

Concern:

Exit lights are energy inefficient incandescent type.

Recommendation:

Replace incandescent type with LED

**Consequences of Deferral:** 

Higher than necessary electrical energy payments and maintenance costs.

TypeYearCostPriorityEnergy Efficiency Upgrade2008\$2,000High

Updated: JAN-07

## D5020.03.01.03 Exterior Metal Halide Fixtures\*

2 - 250W MH HID wall packs are mounted on the N side of the gym and 3 on the W wall.

RatingInstalledDesign LifeUpdated4 - Acceptable199330JAN-07

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## D5020.03.01.04 Exterior H.P. Sodium Fixtures\*

35W MH HID downlights are installed in the entrance canopy. 70W HPS HID lights are located over the exits from the main school building.

RatingInstalledDesign LifeUpdated4 - Acceptable199330JAN-07

## **Event: Add exterior light fixtures**

#### Concern:

There are no light fixtures on the E or S side of the school except near the meter room.

#### Recommendation:

Add exterior light fixtures on the E and S side of the school. Note: residential buildings are nearby, especially on the east side of the school, so appropriate fixtures need to be selected with cut-off lens.

# **Consequences of Deferral:**

Safety and security of personnel and buildings may be compromised.

TypeYearCostPriorityProgram Functional Upgrade2007\$5,000Unassigned

Updated: JAN-07

## D5020.03.02 Lighting Accessories: Exterior (Lighting Controls)\*

A photocell located on the N side of the building controls the exterior lighting.

RatingInstalledDesign LifeUpdated4 - Acceptable199330JAN-07

## D5030.01 Detection and Fire Alarm\*\*

An Edwards EST ESA 2000 zone type single stage Fire Alarm panel is located in the Custodian's office with an annunciator panel at the main entrance. It is a 24V class B system with 8 spare zones. The system is tested annually with monthly fire drills. It was last tested in February 2006. Heat detectors are located in all storage areas. Bell/strobes are located throughout the school and provide good audible and visual alarms. Smoke detectors are installed in the corridors and hold-open devices are on corridor doors. Manual pull stations are located at all exit doors.

Rating Installed Design Life Updated
5 - Good 1993 25 JAN-07

## D5030.02.01 Door Answering\*

The door bell is connected to the PA system. It is operational only after normal school hours and monitored by the Calgary Board of Education.

RatingInstalledDesign LifeUpdated4 - Acceptable199325JAN-07

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#### D5030.02.02 Intrusion Detection\*\*

Silent Knight security system monitored by the CBE. The corridors have motion sensors. The exterior doors have no door contacts

RatingInstalledDesign LifeUpdated5 - Good199325JAN-07

# D5030.03 Clock and Program Systems\*\*

The clock and program system is via the PA system.

RatingInstalledDesign LifeUpdated5 - Good199325JAN-07

#### D5030.04.01 Telephone Systems\*\*

System is a Norstar Meridian system

RatingInstalledDesign LifeUpdated5 - Good199325JAN-07

# D5030.04.03 Call Systems\*\*

The call system is through the PA system. Call/Privacy return call switches are located in all classrooms (including the Portables) and some other rooms. Speakers are located in all rooms.

RatingInstalledDesign LifeUpdated5 - Good199325JAN-07

#### D5030.04.04 Data Systems\*\*

Cat 5e data cable is in all classrooms, offices and the computer room. The main data rack is floor mounted in the library storage room. There are several hubs (data switches) located throughout the school at key locations.

RatingInstalledDesign LifeUpdated4 - Acceptable199325JAN-07

#### D5030.05 Public Address and Music Systems\*\*

The main PA console is located in the administration office and is a Dukane system. Speakers are located in all classrooms, all corridors, the gym and other areas (e.g. custodian's office).

RatingInstalledDesign LifeUpdated5 - Good199320JAN-07

#### D5030.06 Television Systems\*

The school has 2 cable TV outlets. One in the library and one in the staff lounge.

RatingInstalledDesign LifeUpdated4 - Acceptable199320JAN-07

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# D5030.07 Other Communications and Security Systems\*

Supernet is installed

RatingInstalledDesign LifeUpdated5 - Good200220JAN-07

# D5090.01 Uninterruptible Power Supply Systems\*\*

A small UPS for server and Supernet

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1993	30	JAN-07

# **S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**

## E1090.04 Residential Equipment\*

Frig, range, microwave in Staff room and Gym Kitchen

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# E1090.07 Athletic, Recreational, and Therapeutic Equipment\*

Climbing ropes

RatingInstalledDesign LifeUpdated4 - Acceptable199215JAN-07

#### E2010.02 Fixed Casework\*\*

General office and staff base and upper cabinets, Teacher/s cabinets, mail slots, coat storage racks in classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable199235JAN-07

# E2010.03.06 Curtains and Drapes\*\*

Fabric drapes on pull track over windows

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

#### E2020 Moveable Furnishings\*

Classroom tables, desks and chairs. Music room platforms

RatingInstalledDesign LifeUpdated4 - Acceptable199220JAN-07

1993 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Pre-finished metal fascia. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Common connecting corridor gypsum board walls, sheet vinyl floors and acoustic T-Bar ceilings. Acceptable

#### Mechanical

Heating and ventilation provided by furnace (1993). Furnace is Pac-III Model: Pac-III-90N-400-FF with damper control, Input: 26.4 kW, Output: 21.1 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: an ITE 8 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector, manual pull station and FA strobe in the room. The connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by surface mounted luminaires using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

RatingInstalledDesign LifeUpdated4 - Acceptable199425JAN-07

**Event: Replace T12 Lamps with T8** 

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$2,500Low

**Updated:** JAN-07

1996 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Hardiboard exterior siding. Pre-finished metal fascia. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1996). Furnace is Pac-III Model: Pac-III-90N-400-FF with damper control, Input: 26.4 kW, Output: 21.1 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.
Recommendations: None.

# Electrical

The room has it's own power panel: an ITE 8 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T8 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: 1 Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	<b>Design Life</b>	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

1980 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Pre-finished metal fascia. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1990). Furnace is National Comfort Products Model: NTC6100GFA1 with damper control, Input: 29.3 kW. Single deflection supply air grilles. Direct return grille in furnace housing returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Nova 12 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel has 5 spaces for future circuits. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>	
4 - Acceptable	0	0	MAR-07	

# **Event:** Replace T12 Lamps with T8

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$2,500Low

Updated: JAN-07

1984 Wood framed floors, walls and roof. Pre-finished gypsum panel walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard, pull down screen. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. Carpet worn and ravelling. SBS roofing surface granules worn off. Exterior exit doors painted hollow metal doors in painted pressed steel frames complete with panic hardware and weatherstripping

Painted wood framed exterior stair to grade with galvanized metal perforated landing and stair treads. Painted wood railings and balustrade.

Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1999). Furnace is Lennox Model: G24M3/4-100S-12 with damper control, Input: 29.3 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Good.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Commander 12 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. There are 4 spaces for future circuits. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by surface mounted luminaires using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

## **Event: Replace T12 Lamps with T8**

Type	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$2,500	Low

**Updated:** JAN-07

1993 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Sheet vinyl floor seams delaminating. Cedar T&G exterior siding. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1993). Furnace is Pac-III Model: Pac-III-90N-400-FF with damper control, Input: 26.4 kW, Output: 21.1 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: an ITE 8 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

RatingInstalledDesign LifeUpdated4 - Acceptable19920JAN-07

Event: Replace T12 Lamps with T8

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$2,500Low

**Updated: JAN-07** 

1986 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1993). Furnace is National Comfort Products Model: NTC6100GFA1 with damper control, Input: 29.3 kW. Single deflection supply air grilles. Direct return grille in furnace housing returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Commander 12 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. There are 5 spaces for future circuits. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	0	JAN-07

# **Event:** Replace T12 Lamps with T8

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$2,500Low

**Updated: JAN-07** 

1993 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1993). Furnace is Pac-III Model: Pac-III-90N-400-FF with damper control, Input: 26.4 kW, Output: 21.1 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: an ITE 8 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector, manual pull station and FA strobe in the room. The connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by surface mounted luminaires using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

# **Event:** Replace T12 Lamps with T8

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$2,500	Low

Updated: MAR-07

1994 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1994). Furnace is Pac-III Model: Pac-III-90N-400-FF with damper control, Input: 26.4 kW, Output: 21.1 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Westinghouse 12 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. There are 4 spaces for future circuits. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. The lamps are a mix of colours (ww and cw). Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-07

Type Year Cost Priority

Energy Efficiency Upgrade 2007 \$2,500 Low

**Updated:** JAN-07

**Event: Replace T12 Lamps with T8** 

1992 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing.

Painted wood framed exterior stair to grade with galvanized metal perforated landing and stair treads. Painted wood railings and balustrade. Exterior exit doors painted hollow metal doors in painted pressed steel frames complete with panic hardware and weatherstripping. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1995). Furnace is Carrier Weathermaker 8000 Model: WAV090 with damper control, Input: 29.0 kW, Output: 24.4 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Commander 8 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. The lamps are a mix of colours (ww and cw). Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

#### **Event: Replace T12 Lamps with T8**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$2.500	Low

**Updated:** JAN-07

1984 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Pre-finished metal fascia. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing. Common connecting corridor gypsum board walls, sheet vinyl floors and acoustic T-Bar ceilings. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1999). Furnace is Lennox Model: G24M3/4-100S-12 with damper control, Input: 29.3 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Good.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Commander 12 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. There are 4 spaces for future circuits. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by surface mounted luminaires using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

# Event: Replace T12 Lamps with T8

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$2,500	Low

Updated: JAN-07

1989 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Cedar T&G exterior siding. Pre-finished metal fascia. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. SBS roofing Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1994). Furnace is Carrier Model: 58SSB080-BC with damper control, Input: 27.8 kW, Output: 22.9 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: a Commander 12 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

# **Event:** Replace T12 Lamps with T8

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Energy Efficiency Upgrade	2007	\$2,500	Low

**Updated: JAN-07** 

1996 Wood framed floors, walls and roof. Gypsum board painted walls. Sheet vinyl and carpet floors. Suspended Acoustic T-Bar ceiling. Gypsum board to underside of roof joists above T-Bar. Anodized aluminum double hung window with sealed windows, screened vents. Fabric curtains on pull track. Stained wood cubbies for children's storage. Stained wood shelving and coat rack. Chalkboard, tackboard. 3/4 hour rated hollow metal entrance door and frame. Hardiboard exterior siding. Pre-finished metal fasica. Anodized aluminum louvres. Wire mesh protective window screens. Pre-finished metal fascia. Painted plywood skirting. Screened crawl space vents. Acceptable.

#### Mechanical

Heating and ventilation provided by furnace (1996). Furnace is Pac-III Model: Pac-III-90N-400-FF with damper control, Input: 26.4 kW, Output: 21.1 kW. Sidewall supply air grilles. Eggcrate return grilles in ceiling returns air to furnace.

Tech cond: Acceptable.

Recommendations: None.

#### Electrical

The room has it's own power panel: an ITE 8 circuit 120/240V 1 ph. 3W fed from the main electrical panel in school. The panel is full. Communication systems (telephone, data, paging) are connected to the main school systems. The classroom has a FA detector in the room and the connecting corridor has fire detection and signaling devices (bell strobes). All FA devices are connected to the school's main fire alarm system. Lighting is by recessed luminaires mounted in t-bar using T12 lamps. The lamps are a mix of colours (ww and cw). Emergency lighting and exit lights are in the connecting corridor. Exit lights are the incandescent lamp type and are connected to emergency power

Tech cond: acceptable.

Recommendations: Replace T12 lamps with T8 type with electronic ballasts (cost: \$2,500.00)

Replace the exit lamp light source to LED type (cost: \$200.00)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	0	MAR-07

**Event:** Replace T12 Lamps with T8

TypeYearCostPriorityEnergy Efficiency Upgrade2007\$2,500Low

**Updated:** JAN-07

#### F2020.01 Asbestos\*

No asbestos known or reported

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1992	0	JAN-07

#### F2020.02 PCBs\*

No PCB's known or reported

Rating	<u>Installed</u>	Design Life	<b>Updated</b>
4 - Acceptable	0	0	MAR-07

# F2020.04 Mould\*

No mould known or reported

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1992	0	JAN-07

# **S8 FUNCTIONAL ASSESSMENT**

# K4010.01 Barrier Free Route: Parking to Entrance

Let down curb at parking lot to access sidewalk to Main entrance

RatingInstalledDesign LifeUpdated4 - Acceptable19920JAN-07

#### K4010.02 Barrier Free Entrances

No barrier free automatic operator

RatingInstalledDesign LifeUpdated2 - Poor00JAN-07

Event: install automatic door operator

Concern:

Accessibility limited **Recommendation:** 

Install automatic door openers Consequences of Deferral:

Limited accessibility

TypeYearCostPriorityCode Upgrade2007\$3,500Medium

Updated: JAN-07

# K4010.03 Barrier Free Interior Circulation

Clearances at doors, corridor widths

RatingInstalledDesign LifeUpdated4 - Acceptable19920JAN-07

#### K4010.04 Barrier Free Washrooms

Dedicated barrier free washroom with water closet, china sink, lever faucets and grab bars.

RatingInstalledDesign LifeUpdated4 - Acceptable19920JAN-07

# **RECAPP Facility Evaluation Report**



# **Monsignor Neville Anderson School** S2719

Calgary

# Calgary - Monsignor Neville Anderson School (S2719)

**Facility Details** 

**Building Name:** Monsignor Neville Anderson

Address:

Location: Calgary

Building Id: \$2719
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

**Evaluation Details** 

**Evaluation Company:** Neil Jaud Architect inc.

**Evaluation Date:** 

Evaluator Name: Neil Jaud

Total Maintenance Events Next 5 years: \$53,500 5 year Facility Condition Index (FCI): 0%

#### **General Summary:**

The cross plan school is situated on a site sloping from South to North. The entrance fronting street to the North is the lower part of the site. The play fields to the West and South of the building are graded and swaled to direct surface drainage around the building. Portables are attached to the West and South arms of the cross plan. Surface drainage of the south portions of the site is impeded by the placement of the portables and the fixed elevation of the East parking lot and hard play surface. Some ponding and reverse drainage into the buildings is apparent. The staff and guest parking lot is accessed from the fronting street. Overall the site is in good condition.

Mechanical: Domestic water, sanitary sewage and storm water connect to city mains. Catch basins are located in the parking lot and in the back of the school. A fire hydrant is located on site. Gas line connects to utility main. The mechanical site systems are in good condition.

#### Electrical

120/208V 3 phase power to the facility is fed from a 300kVA pad mounted transformer. Concrete bollards with duplex receptacles provide plug-in capability for 36 vehicles.

The site electrical systems are in good condition

**Structural Summary:** 

**Envelope Summary:** 

**Interior Summary:** 

**Mechanical Summary:** 

# **Electrical Summary:**

Rating Guide		
<b>Condition Rating</b>	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

#### G1030 Site Earthwork (Site Grading)\*

The site is graded with swales to direct surface run-off away from and around the building. The swale to the South-East is steeply sloped to a catch basin. Portables extending to the East and South impede the designed flow of surface run-off causing some ponding adjacent to the portable skirting.

RatingInstalledDesign LifeUpdated3 - Marginal199250JAN-07

**Event: Study** 

Concern:

Surface drainage impeded causing ponding adjacent to

buildings

**Recommendation:** 

Conduct study to resolve surface drainage issues

Consequences of Deferral: Excessive maintenance

TypeYearCostPriorityStudy2007\$7,500Unassigned

Updated: JAN-07

# G2010.02.02 Flexible Pavement Roadway (Asphalt)\*\*

Asphalt paved driveway to parking lot and access to rear building

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# G2010.05 Roadway Curbs and Gutters\*

Concrete cast in place curbs bordering the driveway from the street

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

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

Paved parking lot for staff and guest parking

RatingInstalledDesign LifeUpdated4 - Acceptable199210JAN-07

**Event: Replace parking lot paving** 

TypeYearCostPriorityLifecycle Replacement2007\$30,000Low

**Updated:** JAN-07

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#### G2020.05 Parking Lot Curbs and Gutters\*

Cast in place concrete curbs bordering the parking lot. Let down curb for barrier free access.

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# G2020.06.02 Parking Bumpers\*

Pre-cast concrete wheel stops pinned to the asphalt paving.

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# G2020.06.03 Parking Lot Signs\*

Directional signs and barrier free stall sign

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# G2020.06.04 Pavement Markings\*

Painted parking stall lines

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# G2030.02.02 Asphalt Pedestrain Pavement\*\*

Asphalt paved walkways to perimeter of school

RatingInstalledDesign LifeUpdated4 - Acceptable199210JAN-07

**Event: Repalce asphalt paths** 

TypeYearCostPriorityLifecycle Replacement2007\$8,000Low

Updated: JAN-07

#### G2030.04 Rigid Pedestrian Pavement (Concrete)\*\*

Cast in place concrete walkways from street to Main entrance, from West classroom pod exit and from parking lot to Main entrance

RatingInstalledDesign LifeUpdated4 - Acceptable199215JAN-07

**Event:** Replace sidewalks

TypeYearCostPriorityLifecycle Replacement2007\$5,500Low

Updated: JAN-07

# G2030.06 Exterior Steps and Ramps\*

Concrete steps on sidewalk from street to main entrance

RatingInstalledDesign LifeUpdated4 - Acceptable199215JAN-07

# G2040.02 Fences and Gates\*\*

Galvanized metal chain link fence

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

#### G2040.03 Athletic and Recreational Surfaces\*\*

Asphalt paved play area

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

#### G2040.06 Exterior Signs\*

Fascia mounted cut-out letters of school name

RatingInstalledDesign LifeUpdated4 - Acceptable199225JAN-07

# G2040.08 Flagpoles\*

Anodized aluminum flag pole on concrete base

RatingInstalledDesign LifeUpdated4 - Acceptable199230JAN-07

#### G2050.04 Lawns and Grasses\*

Lawn grass worn down to sod in high traffic areas

RatingInstalledDesign LifeUpdated3 - Marginal199215JAN-07

Event: Replace lawn grass sod

Concern:

Lawn grass worn down and soil eroded at high traffic areas

Recommendation:

Replace sod

**Consequences of Deferral:** 

Excessive maintenance. Life safety

TypeYearCostPriorityFailure Replacement2007\$10,000High

Updated: JAN-07

# G2050.05 Trees, Plants and Ground Covers\*

Coniferous and deciduous trees and perennial shrubs at building entrance and side yards.

RatingInstalledDesign LifeUpdated4 - Acceptable199210JAN-07

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

Water line from building connects to city main.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

#### G3010.03 Site Fire Protection Water Distribution\*

Fire hydrant located in side parking lot and across street.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

# G3020.01 Sanitary Sewage Collection\*

Sanitary sewage line connected to city main.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

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#### G3030.01 Storm Water Collection\*

Storm water line connects to city main. One catch basin for the site drainage in back of school and one catch basin in parking area. Site grading around portables does not properly allow for drainage to catch basins. Refer to G1030 Site Earthwork.

RatingInstalledDesign LifeUpdated4 - Acceptable199250JAN-07

#### G3060.01 Gas Distribution\*

Gas line connects to utility mains.

RatingInstalledDesign LifeUpdated5 - Good199250JAN-07

#### G4010.01 Electrical Substations\*

A 300 kW (?) 25kV/120/208V 3 Phase 4W exterior pad mounted transformer located on the west side of the school provides power to the school

RatingInstalledDesign LifeUpdated5 - Good199350JAN-07

### G4010.04 Car Plugs-ins\*

1992 Single storey school with a North facing main entrance and South and East play fields. The site slopes from South to North and the play fields are swaled to direct surface run-off around the core building. The elevation of the asphalt play area and adjacent parking lot is such that the swaled drainage from the rear of the building to the lower North side is impeded. The asphalt parking lot is accessed from the fronting street.

There are 18 concrete bollards each with a duplex receptacle providing plug-in capability for 36 vehicles.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1993	25	JAN-07