# **RECAPP Facility Evaluation Report**

# **Red Deer Public Schl Dist 104**



North Cottage High School B3936A Red Deer

Report run on: January 15, 2009 9:29 AM

Red Deer - North Cottage High School (B3936A)
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Facility Details		Evaluation Details	
Address:	North Cottage High School 5704 - 60 Street Red Deer	Evaluation Company: Jacques Whitford AXYS Ltd. Evaluation Date: June 16 2008 Evaluator Name: Dave Burnes	
Building Id: Gross Area (sq. m): Replacement Cost: Construction Year:	238.00 \$570,710	Total Maintenance Events Next 5 years:	\$61,000
General Summarv:		5 year Facility Condition Index (FCI):	10.69%

The North Red Deer Cottage School is located at 5740-60th Street in Red Deer, AB. The two-room, two-storey, wood framed school was reportedly constructed in 1911 and encompasses a reported total gross floor area of 238 m<sup>2</sup>. The school received a fire escape in1929, electricity in 1936 and indoor plumbing in 1949. The school received its last major renovation in 1989, (including new exterior windows), and the roofing, flooring and exterior paint was replaced in 1998.

#### **Structural Summary:**

The North Red Deer Cottage School is a wood framed, two-storey structure with a basement, and it was reported the foundation consists of stone. The school has a hip style, asphalt shingle roof with an intersecting gable on the south side. The main and second floors consist of a wood floor joist system supported by the foundation and load-bearing wood framed walls. Ceilings in the basement are very low, (1.9m).

Major work recommended includes construction of an elevator enclosure, construction of a barrier free washroom, and a study to determine the cause of the localized floor deflection.

The facility's structural elements were observed to be in generally acceptable condition.

#### **Envelope Summary:**

The exterior cladding of the school consists of painted horizontal wood siding. The hip style roof is finished with asphalt shingles, the windows consist of fixed and operable insulating glazing units (IGU's) set in painted wood frames. The exterior doors consist of residential grade insulated steel doors.

The facility's building envelope was observed to be in generally acceptable condition. No major work is recommended.

#### Interior Summary:

The majority of the school has carpet flooring with the balance of the flooring consisting of resilient tile. The floor in the basement consists of sealed/painted concrete. The majority of the interior walls consist of painted gypsum board with some areas of painted wainscoting. The majority of the ceilings throughout the building have suspended T-bar systems with inlaid acoustic tiles, however, the basement has painted gypsum board ceilings.

The facility's interior finishes were observed to be in generally acceptable condition. No major work is recommended.

#### **Mechanical Summary:**

Two natural gas-fired furnaces provide heating and an unitary air conditioner provides cooling to the building. Exhaust fans provide ventilation for the washrooms. HVAC equipment in the building is controlled by thermostats. Fire extinguishers are located throughout the building. There is no sprinkler system in the building. Backflow prevention devices were not found at the time of the site assessment.

The following are recommended actions for the next five years: -install backflow prevention device on the domestic water line; and, -install sprinkler system.

Overall the mechanical systems in the building are in acceptable condition.

# **Electrical Summary:**

The building has a 200 Amp, 120/208 Volt service which feeds lighting, power receptacles, and mechanical equipment in the building. Most of the observed wiring was in conduit.

Interior lighting is provided by T12 fluorescent technology throughout the building. Exterior lighting is provided by two wall-mounted incandescent fixtures near the entrance. Emergency lighting in the building is provided by battery pack emergency lighting fixtures. Exit lighting in the building is provided by incandescent exit signs.

The building is protected by an Edwards fire alarm system and DSC Maxsys security system, and is equipped with a Trillium telephone system and LAN system.

The following are recommended actions for the next five years:

-install motor starter for furnaces; -upgrade T12 fluorescent fixtures to T8 technology; -replace the original exit signs with LED technology; and, -install additional exterior fixtures.

Overall the electrical systems in the building are in fair condition.

Rating Guide			
Performance			
Unsafe, high risk of injury or critical system failure.			
Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.			
Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.			
Meets present requirements, minor deficiencies. Average operating/maintenance costs.			
Meets all present requirements. No deficiencies.			
As new/state of the art, meets present and foreseeable requirements.			

# S1 STRUCTURAL

# A1010 Standard Foundations\*

Construction drawings were not available for review during the assessment; however, due to the school's age and the thickness of the basement walls, the foundations presumably consist of stone.

<u>Rating</u>	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1911	100	JAN-09

### A1030.01 Standard Slabs on Grade\*

The floor in the basement is cast-in-place concrete. Due to the age and amount of cracking of the slab, the presence of reinforcement is doubtful.

Rating	<b>Installed</b>	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1911	0	JAN-09

#### A2020 Basement Walls (& Crawl Space)\*

The basement walls are presumed to consist of stone.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1911	100	JAN-09

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

Structural components of the building mainly consist of wood stud framing.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1911	100	JAN-09

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

Interior load bearing walls consist of wood stud framing.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1911	100	JAN-09

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

It is believed that the main and second floor decks consist of wood floor joists and shiplap decking.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
3 - Marginal	1911	100	JAN-09

#### Event: Investigate Floor Deflection and Repair Floor

### Concern:

The floor on both the main and second floors was observed to be significantly sloping in an isolated area along the north wall. The floor was noted to have a slope downwards and away from the north wall of approximately 35mm over a distance of approximately 800mm.

#### **Recommendation:**

Investigate the cause of the floor deflection and repair it. **Consequences of Deferral:** 

If not addressed, the condition of the floor may continue to deteriorate increasing the cost of the future repair. It is also possible that deflected portions of the floor are under structural distress.

Туре	<u>Year</u>	<u>Cost</u>	<b>Priority</b>
Repair	2009	\$15,000	High

Updated: JAN-09

#### B1010.04 Balcony Floor Construction (& Decks)-veranda\*

A wood-framed, veranda with wood decking is located at the entrance on the south side of the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1998	80	JAN-09

#### B1010.07 Exterior Stairs\*

Two sets of wooden stairs provide access to the main floor of the school. One provides access to the veranda and main entrance on the south elevation and the other provides access on the east elevation. A steel fire escape, installed in 1929, is located on the north side of the building and provides an emergency exit from the second floor.

<u>Rating</u>	Installed	Design Life	<b>Updated</b>
4 - Acceptable	2007	40	JAN-09

#### B1020.01 Roof Structural Frame\*

The building has a hip style roof with an intersecting gable on the south side. The construction is assumed to be framed with wood rafters and shiplap decking.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1911	100	JAN-09

### B1020.04 Canopies\*

A hip style roof with an intersecting gable is located over the veranda on the south side of the building. The wood framed structure is partially supported by wood columns on the veranda. A similar style roof is located over the rear entrance on the east side of the building.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1911	50	JAN-09

# S2 ENVELOPE

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

The exposed portions of the foundation walls are covered by a cementicious parging.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1989	75	JAN-09

#### Event: Repair parging

#### Concern:

The parging around the foundation of the building was observed to be cracked and crumbling in a several areas. **Recommendation:** 

# Repair parging.

# Consequences of Deferral:

If not addressed, the condition of the parging may continue to deteriorate increasing the cost of future repair. Loss of protection of substrate and loss of aesthetics.

Туре	<u>Year</u>	Cost	<b>Priority</b>
Repair	2009	\$2,000	Medium

Updated: JAN-09

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

Joint sealant is applied to the perimeters of exterior window units and doors.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	20	JAN-09

#### Event: Replace joint sealants/caulking.

Туре	Year	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2018	\$2,000	Unassigned

#### B2010.01.13 Paints (& Stains): Exterior Wall\*\*

The exterior wood siding on the building is finished with paint. The paint was observed to be faded, cracked, and peeling. However, the site representative advised that the building is scheduled for re-painting in the summer of 2008. Therefore a repair event or repair cost has not been provided.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	2008	15	JAN-09

#### Event: Re-paint approx. 218 m<sup>2</sup> of exterior wall.

Туре	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$14,000	Unassigned

Updated: JAN-09

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

Exterior wall construction consists of wood framing.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1911	100	JAN-09

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

Architectural drawings were not available during the assessment. However, it is presumed that as part of the renovation of 1989, a vapor retarder and insulation was added to the exterior walls. The type and extent of materials used could not be reviewed visually and exterior wall cavities were not accessed during the site visit.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	100	JAN-09

#### B2010.09 Exterior Soffits\*

A painted wood plank soffit with metal vents is provided around the perimeter of the building.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1911	50	JAN-09

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

The exterior windows consist of insulating glazing units set in painted wood frames.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	35	JAN-09

#### Event: Replace approx. 24 exterior windows

Туре	<u>Year</u>	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2024	\$27,000	Unassigned

	B2030.02	Exterior	Utility	Doors**
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Exterior doors are residential grade steel doors set in wood frames.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	40	JAN-09

	<b>Type</b> Lifecycle Replacement	<u>Year</u> 2029	<u>Cost</u> \$4,000	Priority Unassigned
	Updated: JAN-09			
<u>B3010.0</u>	02.01.01 Asphalt Shingle	S**		
The roof	fing for the building consis	sts of asp	ohalt shingle	S.
<u>Rating</u> 4 - Accep		<u>alled</u> <u>D</u> 998	<b>esign Life</b> 25	Updated JAN-09
Event:	Replace approx. 150m <sup>2</sup>	<sup>2</sup> of asph	alt shingles	<u>s.</u>
	<b>Type</b> Lifecycle Replacement	<u>Year</u> 2023	<u>Cost</u> \$8,000	Priority Unassigned
	Updated: JAN-09			
<u>B3010.0</u>	8.02 Metal Gutters and	Downsp	outs**	
Pre-finis	hed metal gutters and do	wnspout	s are located	d around the perimeter of the main roof and veranda roof.
<u>Rating</u> 4 - Accep		<b>alled</b> <u>D</u> 998	<b>esign Life</b> 30	Updated JAN-09
Event:	Replace metal gutters	and dow	<u>nspouts</u>	
	<b>Type</b> Lifecycle Replacement	<u>Year</u> 2028	<u>Cost</u> \$1,000	Priority Unassigned
	Updated: JAN-09			
	2 Other Roofing Openir	ngs (Hate	ch,Vent, etc	<u>)*</u>
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# **S3 INTERIOR**

# C1010.01.07 Framed Partitions (Stud)\*

Wood framed partitions are located on all floors.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1911	100	JAN-09

# C1020.01 Interior Swinging Doors (& Hardware)\*

The majority of interior doors are painted wood units set in painted wood frames.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	40	JAN-09

#### C1020.03 Interior Fire Doors\*

Interior fire doors consist of painted steel doors set in painted steel frames.

<u>Rating</u>	<b>Installed</b>	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	50	JAN-09

# C1030.01 Visual Display Boards\*\*

Visual display boards are located in the main and second floor classroom areas and consist of 4 Black boards, 2 cork boards, and 2 white boards.

<u>Rating</u>	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1989	20	JAN-09

#### Event: Replace 8 Visual Display Boards

Туре	Year	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2012	\$10,000	Unassigned

Updated: JAN-09

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

Pre-finished metal stall partitions are provided in the washrooms.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1989	30	JAN-09

# **Event:** Replace toilet partitions

Туре	Year	Cost	<b>Priority</b>
Lifecycle Replacement	2019	\$9,000	Unassigned

#### C1030.10 Lockers\*\*

Stacks of 203mm x 305mm metal lockers are provided on the first and second floors.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1989	30	JAN-09

#### Event: Replace 40 lockers

Туре	<u>Year</u>	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2019	\$15,000	Unassigned

Updated: JAN-09

# C1030.12 Storage Shelving\*

Moveable wood shelving units are provided in several locations.

Rating	Installed	Design Life	Updated
4 - Acceptable	1989	30	JAN-09

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

Standard commercial quality washroom hardware is located in the washrooms which consists of wall-mounted mirrors, soap dispensers, paper towel dispensers, and toilet paper dispensers.

Priority Unassigned

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	20	JAN-09

#### C2010 Stair Construction\*

Wood framed stairs provide access to the second floor and the basement.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1911	100	JAN-09

#### C2020.05 Resilient Stair Finishes\*\*

Both sets of interior stairs have a rubber finish on the treads and risers.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	20	JAN-09

# Event: Replace rubber stair finish

Concern:

Туре	<u>Year</u>	<u>Cost</u>
Lifecycle Replacement	2012	\$5,000

Both stair wells have a painted wooden handrail.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1989	40	JAN-09

### C3010.02 Wall Paneling\*\*

Painted tongue and groove wood wainscoting is located on the walls in the stairway leading to the second floor and continues to the front entrance.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1911	30	JAN-09

#### Event: Replace approx. 20m<sup>2</sup> of wainscoting

Туре	Year	Cost	<b>Priority</b>
Lifecycle Replacement	2012	\$10,000	Unassigned

Updated: JAN-09

### C3010.06 Tile Wall Finishes\*\*

#### The wall around the urinal is finished with ceramic tile.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1989	40	JAN-09

#### Event: Replace ceramic wall tile.

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$1,000	Unassigned

Updated: JAN-09

# C3010.11 Interior Wall Painting\*

#### The majority of interior walls are painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	1998	10	JAN-09

C3020.07 Resilient Flooring**         Vinyl tile flooring is located in several areas throughout the building (ie., vestibules, kitchen, and locker area).         Rating       Installed       Design Life       Updated         4 - Acceptable       1989       20       JAN-09         Event:       Replace vinyl tile flooring Concern:       Year       Cost       Priority         Lifecycle Replacement       Year       Cost       Priority         Updated:       JAN-09       JAN-09         Cancern:         Z020.08       Carpet Flooring**         The majority of the first and second floors are finished with carpet.         Rating       Installed       Design Life       Updated         4 - Acceptable       1998       15       JAN-09         Event:       Replace approx. 150m² of carpet       Type       Year       Cost       Priority         Updated:       JAN-09       JAN-09       Unassigned       Unassigned       Updated         20300.04       Gypsum Board Ceiling Finishes (Unpainted)*       Unassigned       Unassigned         Updated:       JAN-09       Unassigned       Unassigned       Unassigned         C3030.04       Gypsum Board Ceiling Finishes (Unpainted)*       Unassigned       Un
Rating 4 - Acceptable       Installed 1989       Design Life 20       Updated JAN-09         Event:       Replace vinyl tile flooring Concern:       Image: Concern:       Image: Concern:         Lifecycle Replacement       2012       \$1,000       Unassigned         Updated:       JAN-09       Image: Concern:       Image: Concern:         C3020.08       Carpet Flooring**       Image: Concern:       Image: Concern:         C3020.08       Carpet Flooring**       Image: Concern:       Image: Concern:         Carpet Flooring**       Image: Concern:       Image: Concern:       Image: Concern:         Carpet Flooring**       Image: Concern:       Image: Concern:       Image: Concern:         Carpet Flooring**       Image: Concern:       Image: Concern:       Image: Concern:         Rating       Image: Concern:       Image: Concern:       Image: Concern:         Lifecycle Replace approx. 150m² of carpet       Image: Concern:       Image: Concern:       Image: Concern:         Lifecycle Replacement       Year       Concern:       Image: Concern:       Image: Concern:         Lifecycle Replacement       Year       Concerne:       Concerne:       Image: Concerne:         C3030.04       Gypeune Board Ceiling Finishes (Unpainted)*       Imassigned       Image: Concerne:
4 - Acceptable       1989       20       JAN-09         Event:       Replace vinyl tile flooring Concern:       Vear       Cost       Priority         Lifecycle Replacement       2012       \$1,000       Unassigned         Updated:       JAN-09       Updated:       JAN-09         C3020.08 Carpet Flooring**       The majority of the first and second floors are finished with carpet.         Rating       Installed       Design Life       Updated         4 - Acceptable       1998       15       JAN-09         Event:       Replace approx. 150m² of carpet       Lifecycle Replacement       2013       \$11,000         Updated:       JAN-09       Updated:       JAN-09       Upassigned         Event:       Replace approx. 150m² of carpet       Lifecycle Replacement       2013       \$11,000       Unassigned         Updated:       JAN-09       Upassigned       Upassigned       Upassigned       Upassigned         S0330.04 Gypsum Board Ceiling Finishes (Unpainted)*       The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling syster         Rating       Installed       Design Life       Updated         4 - Acceptable       Installed       Design Life       Updated         1989
Image: Concern:       Year       Cost       Priority         Lifecycle Replacement       2012       \$1,000       Unassigned         Updated:       JAN-09         C3020.08 Carpet Flooring**         The majority of the first and second floors are finished with carpet.         Rating       Installed       Design Life       Updated         1998       15       JAN-09         Event:       Replace approx.150m² of carpet       Year       Cost       Priority         Lifecycle Replacement       2013       \$11,000       Unassigned         Updated:       JAN-09       Unassigned       Unassigned         Event:       Replace approx.150m² of carpet       Image: Cost       Priority         Lifecycle Replacement       2013       \$11,000       Unassigned         Updated:       JAN-09       Unassigned       Unassigned         Z0303.04 Gypsum Board Ceiling Finishes (Unpainted)*       The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system         Rating       Installed       Design Life       Updated         1989       60       JAN-09       JAN-09
Lifecycle Replacement       2012       \$1,000       Unassigned         Updated:       JAN-09         C3020.08 Carpet Flooring**         The majority of the first and second floors are finished with carpet.         Rating       Installed       Design Life       Updated:         4 - Acceptable       1998       15       JAN-09         Event:       Replace approx. 150m² of carpet       Iffective content is a second floor for the first and second floor for the first is a second floor for the first and second floor for the first and second floor for the first is a second floor for the first and for th
The majority of the first and second floors are finished with carpet.         Rating       Installed       Design Life       Updated         4 - Acceptable       1998       15       JAN-09         Event:       Replace approx. 150m² of carpet       Year       Cost       Priority         Lifecycle Replacement       2013       \$11,000       Unassigned         Updated:       JAN-09         C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*         The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system         Rating       Installed       Design Life       Updated         4 - Acceptable       1989       60       JAN-09
Rating 4 - Acceptable       Installed 1998       Design Life 15       Updated JAN-09         Event:       Replace approx. 150m² of carpet       Year 2013       Cost \$11,000       Priority Unassigned         Lifecycle Replacement       2013       \$11,000       Unassigned         Updated:       JAN-09         C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*         The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system         Rating 4 - Acceptable       Installed 1989       Design Life 60       Updated JAN-09
4 - Acceptable       1998       15       JAN-09         Event:       Replace approx. 150m² of carpet         Image: Type Lifecycle Replacement       Year 2013       Cost \$11,000       Priority Unassigned         Updated:       JAN-09         C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*         The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system         Rating 4 - Acceptable       Installed 1989       Design Life Updated JAN-09
Type Lifecycle ReplacementYear 2013Cost \$11,000Priority UnassignedUpdated:JAN-09C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling systemRating 4 - AcceptableInstalled 1989Design Life 60Updated JAN-09
Lifecycle Replacement       2013       \$11,000       Unassigned         Updated:       JAN-09         C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*         The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system         Rating       Installed       Design Life       Updated         4 - Acceptable       1989       60       JAN-09
C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*         The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system         Rating       Installed       Design Life       Updated         4 - Acceptable       1989       60       JAN-09
The ceilings of first and second floors have unpainted gypsum board ceilings above the suspended T-bar ceiling system <b>Rating</b> 4 - Acceptable <b>Installed</b> 1989 <b>Design Life</b> <b>Updated</b> JAN-09
Rating 4 - AcceptableInstalled 1989Design Life 60Updated JAN-09
4 - Acceptable 1989 60 JAN-09
C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)**
The first and second floors have suspended T-bar ceiling systems with inlaid acoustic tile throughout.
RatingInstalledDesign LifeUpdated4 - Acceptable198925JAN-09
Event: Replace approx. 160m <sup>2</sup> of accustic ceiling tiles
Type Year Cost Priority
Lifecycle Replacement 2014 \$8,000 Unassigned Updated: JAN-09

# C3030.07 Interior Ceiling Painting\*

The basement ceiling is finished with painted gypsum board.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1989	20	JAN-09

# **S4 MECHANICAL**

# D2010.04 Sinks\*\*

There are two stainless steel sinks in kitchens.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1980	30	JAN-09

### Event: Replace two sinks

Туре	Year	Cost	<b>Priority</b>
Lifecycle Replacement	2012	\$3,000	Unassigned

Updated: JAN-09

# D2010.10 Washroom Fixtures (WC, Lav, Urnl)\*\*

There are approximately three vitreous china flush tank water closets, one wall-mounted vitreous china urinals, and two enamel steel lavatories in washrooms.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1980	35	JAN-09

#### Event: Replace washroom fixtures

Туре	Year	Cost	<b>Priority</b>
Lifecycle Replacement	2015	\$13,000	Unassigned

Updated: JAN-09

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

Domestic piping is generally copper and original to the building.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1949	40	JAN-09

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

There are isolation valves in place on the domestic plumbing lines.

Rating	Installed	Design Life	Updated
4 - Acceptable	1949	40	JAN-09

#### Event: Replace 3 domestic water valves

Туре	Year	Cost	<b>Priority</b>
Lifecycle Replacement	2012	\$4,000	Unassigned

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

Backflow prevention devices are not installed on the domestic water line.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
3 - Marginal	1911	20	JAN-09

#### Event: Install 3/4" back flow preventor

#### Concern:

Back flow prevention devices are not installed on the domestic water line.

### **Recommendation:**

Install 3/4" back flow preventor on the domestic water line to protect water supply from contamination or pollution.

Туре	<u>Year</u>	Cost	<b>Priority</b>
Preventative Maintenance	2009	\$1,000	Medium

Updated: JAN-09

### D2020.02.06 Domestic Water Heaters\*\*

A Giant gas-fired domestic hot water heater with 30 USG storage and 30 MBH input is located in the mechanical room.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	2001	20	JAN-09

#### Event: Replace domestic water heater

Туре	<u>Year</u>	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2021	\$3,000	Unassigned

Updated: JAN-09

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

Waste and vent piping is generally plastic and cast iron.

Rating	Installed	Design Life	Updated
4 - Acceptable	1949	50	JAN-09

#### D2040.01 Rain Water Drainage Piping Systems\*

The storm water is discharged at ground level via metal downspouts.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1949	50	JAN-09

		Ked Deer - North Collage High School (B5950A)		
D3010.02 Gas Supply System	<u>ns*</u>			
Natural gas piping feeds the fu	Irnaces and domestic	hot water heater.		
RatingIr4 - Acceptable	nstalled Design Life 1949 60	<b><u>Updated</u></b> JAN-09		
D3020.03.01 Furnaces**				
The building is heated by two r mechanical room.	natural gas-fired furna	ces (Carriar WeatherMaker 8000) c/w DX cooling coils located in the		
RatingIr4 - Acceptable	nstalled Design Life 2000 25	<b><u>Updated</u></b> JAN-09		
Event: Replace two furnace	25			
<b>Type</b> Lifecycle Replacement	Year         Cost           2025         \$6,000	Priority Unassigned		
Updated: JAN-09				
D3020.03.02 Chimneys (&Cor	mb. Air): Furnace*			
Furnace flues exit through the	roof.			
RatingIr4 - Acceptable	nstalled Design Life 1980 25	<u><b>Updated</b></u> JAN-09		
D3040.01.04 Ducts: Air Distri	ibution*			
The air distribution ductwork is	original and located i	n the basement ceiling space.		
RatingIr4 - Acceptable	nstalled Design Life 1980 50	<b><u>Updated</u></b> JAN-09		
D3040.01.07 Air Outlets & Inlets: Air Distribution*				
Floor-mounted and ceiling-mounted registers are located throughout the building to provide supply air.				
RatingIr4 - Acceptable	nstalledDesign Life198030	2 <u>Updated</u> JAN-09		

				Red Deer - North Cottage High School (B3936A)
D3040.0	04.01 Fans: Exhaust**			
There a	re two ceiling-mounted e	xhaust fans	providing	ventilation for the washrooms.
<u>Rating</u> 3 - Margi		<u>talled</u> <u>Des</u> 980	i <b>gn Life</b> 30	Updated JAN-09
Event:	Replace broken exhau Concern: The exhaust fan in the time of the assessment Recommendation: Replace the broken exh	girl washroor		It of service at the
Front	<u>Type</u> Repair <b>Updated:</b> JAN-09		<u>51,00</u> 0	<u>Priority</u> Medium
Event:	Replace the remainingTypeLifecycle ReplacementUpdated:JAN-09	<u>Year</u> C	<u>n</u> Sost S1,000	<u>Priority</u> Unassigned
D3050.0	01 Unitary Air Conditior	ing Equipm	ent	
There is	an outdoor condensing	unit connect	ed to DX	coils in the furnaces providing cooling to the school.
<b>Rating</b> 4 - Acce		talled Des 2000	i <b>gn Life</b> 0	Updated JAN-09
D4030.0	01 Fire Extinguisher, Ca	binets and	Accesso	ries*
Handhe	ld fire extinguishers are I	ocated throu	ghout the	e building and are checked annually.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1980	30	JAN-09

# **S5 ELECTRICAL**

D5010.03 Main Electrical Switchboards (Main Distribution)**
The main electrical service is estimated to be 200 Amps, 120/208 Volts.
RatingInstalledDesign LifeUpdated4 - Acceptable198040JAN-09
Event: Replace main electrical switchboard
TypeYearCostPriorityLifecycle Replacement2020\$6,000Unassigned
Updated: JAN-09
D5010.07.02 Motor Starters and Accessories**
Motor starter is provided for the unitary air conditioner located on the west elevation of the building.
RatingInstalledDesign LifeUpdated3 - Marginal200030JAN-09
Event: Install motor starters for furnaces Concern: Motor starters are not provided for furnaces which are operated by disconnect switch only. Recommendation: Install motor starters for furnaces.
TypeYearCostPriorityOperating Efficiency Upgrade2009\$2,000Medium
Updated: JAN-09
Event: Replace motor starter for unitary AC
TypeYearCostPriorityLifecycle Replacement2030\$1,000Unassigned
Updated: JAN-09
D5020.01 Electrical Branch Wiring*
The electrical wiring in the building is standard copper wire in conduit. Flexible conduit and cabling is provided to motors and other mechanical equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	50	JAN-09

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

Fluorescent fixtures are used throughout the school and consist of recessed T12 fixtures with magnetic ballasts.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1980	30	JAN-09

#### Event: Upgrade T12 fixtures to T8

#### Concern:

T12 fluorescent lighting fixtures are less efficient than T8 technology. **Recommendation:** Replace existing fluorescent fixtures with T8 bulbs and electronic ballast equivalents.

TypeYearCostPriorityEnergy Efficiency Upgrade2009\$22,000Medium

Updated: JAN-09

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

Emergency lighting in the building is provided by battery-powered emergency lighting fixtures.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1980	20	JAN-09

#### Event: Replace emergency lighting units

Туре	<u>Year</u> Cost	<b>Priority</b>
Lifecycle Replacement	2012 \$8,000	Unassigned

Updated: JAN-09

#### D5020.02.03.03 Exit Signs\*

There are standard incandescent exit signs throughout the building.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	30	JAN-09

### Event: Upgrade to LED exit signs

**Concern:** Incandescent fixtures are less energy efficient than current LED technology. **Recommendation:** Upgrade the current exit signs to LED fixtures.

Туре	<u>Year</u>	Cost	<b>Priority</b>
Energy Efficiency Upgrade	2009	\$6,000	Medium

#### D5020.03.01.01 Exterior Incandescent Fixtures\*

Two exterior incandescent lighting fixtures are provided at the main entrance of the building.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
3 - Marginal	1980	30	JAN-09

### Event: Install exterior lighting

#### Concern:

There is no exterior lighting provided on the other elevations of the building. **Recommendation:** Install exterior lighting on all the elevations of the building.

Туре	Year	Cost	<b>Priority</b>
Operating Efficiency Upgrade	2009	\$4,000	Medium

Updated: JAN-09

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

Edwards 6616 fire alarm system is connected to bells, manual pull stations and detectors throughout the building.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	2000	25	JAN-09

#### Event: Replace detection and fire alarm system

Туре	Year	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2025	\$6,000	Unassigned

Updated: JAN-09

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

The building is equipped with a DSC Maxsys PC4020 security system.

<u>Rating</u>	Installed	Design Life	<b>Updated</b>
4 - Acceptable	2000	25	JAN-09

# Event: <u>Replace security panel, keypads and motion</u>

detectors

Туре	Year	Cost	
Lifecycle Replacement	2025	\$6,000	

Priority Unassigned

# D5030.04.01 Telephone Systems\*

The building is served by a Trillium Panther 306 phone system.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	2000	25	JAN-09

# D5030.04.05 Local Area Network Systems\*

A network switch is installed complete with Category 5 cable.

Rating	<b>Installed</b>	Design Life	<u>Updated</u>
4 - Acceptable	2000	15	JAN-09

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

# E2010.02 Fixed Casework\*\*

Fixed cabinetry is located below chalk boards and along the classroom walls on the first and second floors.

Rating	Installed	<u>Design Life</u>	<b>Updated</b>
4 - Acceptable	1989	35	JAN-09

#### Event: Replace approx. 30m of fixed case work

<u>Type</u>	Year	<u>Cost</u>	<b>Priority</b>
Lifecycle Replacement	2024	\$17,000	Unassigned

Updated: JAN-09

### E2010.03.01 Blinds\*\*

Horizontal slat, aluminum blinds are provided on the majority of windows.

Rating	Installed	Design Life	<b>Updated</b>
4 - Acceptable	1989	30	JAN-09

#### Event: Replace blinds

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2019	\$5,000	Unassigned

Updated: JAN-09

#### F2020.01 Asbestos\*

The gypsum board joint compound in this building could potentially contain asbestos.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1911	0	JAN-09

#### F2020.04 Mould\*

No suspected mould growth was noted on visible surfaces during the assessment. Wall cavities and the majority of the ceiling cavities were not reviewed during the site visit.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1911	0	JAN-09

# F2020.09 Other Hazardous Materials\*

No other hazardous materials were identified during the review of the facility.

Rating	Installed	Design Life	Updated
4 - Acceptable	1911	0	JAN-09

# **S8 FUNCTIONAL ASSESSMENT**

# K3010 Building Services

There is no sprinkler system provided in the building.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
2 - Poor	0	0	JAN-09

#### Event: Install sprinkler system

#### Concern:

Sprinklers should be installed in the building to meet the current building codes

#### **Recommendation:**

Install sprinkler system. Estimate based on the area of the building.

Туре	Year	Cost	<b>Priority</b>
Code Upgrade	2009	\$16,000	Medium

Updated: JAN-09

#### K4010.01 Barrier Free Route: Parking to Entrance\*

There is no on-site parking for this facility.

<u>Rating</u>	Installed	<u>Design Life</u>	<b>Updated</b>
3 - Marginal	0	0	JAN-09

#### Event: Upgrade route to be barrier free

#### Concern:

Route from parking to entrance is not barrier free. **Recommendation:** 

Due to the lack of nearby parking, appropriate signage and curb cuts should be installed on the street as close to the main entrance as possible. A ramp is required to gain access to the veranda at the front entrance.

# **Consequences of Deferral:**

Non-compliance with current barrier-free codes/standards and an impedance for handicapped users.

Туре	Year	Cost	<b>Priority</b>
Barrier Free Access Upgrade	2009	\$7,000	High

#### K4010.02 Barrier Free Entrances\*

The exterior doors on the building are manually-operated, pivot-type doors.

Rating	Installed	Design Life	<b>Updated</b>
3 - Marginal	1989	0	JAN-09

#### Event: Install automated doors

#### Concern:

The exterior door at the building's main entrance is a manually-operated, pivot-type door (i.e., automated entry to the building is not provided).

# **Recommendation:**

Install automated door openers at the building's main entrance to provide barrier-free access to the school interior.

# **Consequences of Deferral:**

Non-compliance with current barrier-free codes/standards and an impedance for handicapped users.

Туре	Year	Cost	<b>Priority</b>
Barrier Free Access Upgrade	2009	\$3,000	High

Updated: JAN-09

#### K4010.03 Barrier Free Interior Circulation\*

There is no barrier free access to the second floor of the school.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1911	0	JAN-09

#### Event: Install outside elevator

#### Concern:

Barrier free access is not provided to the second floor of the school.

#### **Recommendation:**

Install an elevator in an enclosure on the exterior of the building to provide access to the second floor.

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

Non-compliance with current barrier-free codes/standards and an impedance for handicapped users.

Туре	Year	<u>Cost</u>	<b>Priority</b>
Barrier Free Access Upgrade	2009	\$200,000	High

#### K4010.04 Barrier Free Washrooms\*

The only washrooms in the building are located in the basement and are not barrier free.

Rating	Installed	Design Life	<u>Updated</u>
3 - Marginal	1911	0	JAN-09

#### Event: Install barrier free washroom on main floor

#### Concern:

The only washrooms in the building are located in the basement and are not barrier free.

# Recommendation:

Construct a barrier free washroom on main the main floor.

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

Non-compliance with current barrier-free codes/standards and an impedance for handicapped users.

Туре	Year	Cost	<b>Priority</b>
Barrier Free Access Upgrade	2009	\$25,000	High