RECAPP Facility Evaluation Report

Northland School Div #61



St. Theresa School B4751A Wabasca - Desmarais

Report run on: March 19, 2009 12:01 PM

Wabasca - Desmarais - St. Theresa School (B4751A)

Facility Details

Building Name:St. Theresa SchoolAddress:12 Neewatim Drive P. O. BCLocation:Wabasca - Desmarais

Building Id:B4751AGross Area (sq. m):4,952.19Replacement Cost:\$14,031,111Construction Year:1961

Evaluation Details

Evaluation Company: Wade Engineering

Evaluation Date: October 24 2008

Evaluator Name: Ron Shannon/Mike Pangman

Total Maintenance Events Next 5 years:\$147,6005 year Facility Condition Index (FCI):1.05%

General Summary:

Located in Wabasca, AB, grades K-5 with 352 students and capacity of 628. Constructed in 1961 with additions in 1976, 1986, 2002 when new gym was built. Re-locatable classrooms (7 in total) tied-in on roof and linked with common hallway along east aide of building in 2002. Modernizations were completed in 1986 and 2002.

Structural Summary:

1961 grade beam and concrete piles with dirt crawlspace and wood joists and beams, plywood subfloor and wood frame construction,

All other sections concrete grade beam and pile construction with slab on grade, concrete block walls, with open web steel joists and steel Q deck.

Re-locatable classrooms are on screw piles. Overall condition is acceptable.

Envelope Summary:

1961, 76 sections were modernized with the 1986 addition with new aluminum windows, brick veneer over 38mm rigid insulation on exterior walls. Roofing is a mixture of A&G built up roofing, inverted 4 ply roofing and SBS torch applied membrane of varying ages. The inverted roofing is 1986 and is not expected to last more than 2-3 years. 2002 addition is brick veneer and steel siding on upper gym with metal roof on the mansard section around the perimeter of the roof and new sloped steel roofing over the 1986 ANC addition and main entrance. An anti-graffiti coating was applied to the brick in 2007 and 2008 and it appears to have reacted with the sealants on the building and has caused wholesale failure of the caulking. Replacement of the sealants is recommended. Overall condition is acceptable.

Interior Summary:

Painted block and GWB used primarily with minimal wall tile in boys washrooms. Ceramic floor tile in washrooms and change rooms, sheet linoleum and carpet in classrooms and offices. Majority of finishes, cabinetry and hardware replaced in 2002 modernization with a few 1986 sections of flooring to do. Overall condition is good.

Mechanical Summary:

The facility was modernized in 2002, which approximately 90% of the mechanical systems were upgraded. The building mechanical equipment is therefore in excellent condition. However, there are several issues relating to the control system upgrades that should be addressed. Overall condition is good.

Electrical Summary:

Incoming underground service from an exterior 300 KVA pad mounted transformer is 1200 amps, 120/208 volts, 3 phase, 4 wire. Main and secondary electrical distribution in good condition. Panel boards installed in the 1976 and 1986 are in acceptable condition. Interior lighting is good with the exception of the lighting by the gymnasium, light level is low in the morning. Overall electrical condition is Good.

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

S1 STRUCTURAL

Concrete piles and Grade Beam

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1961	0	MAR-09

A1010 Standard Foundations - 1976 Section*

Concrete piles and Grade Beam

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	0	MAR-09

A1010 Standard Foundations - 1986 Section*

Concrete piles and Grade Beam

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	0	MAR-09

A1010 Standard Foundations - 2002 Section*

Concrete piles and Grade Beam

Rating	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

A1030 Slab on Grade - 1976 Section*

Concrete floor slab

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	0	MAR-09

A1030 Slab on Grade - 1986 Section*

Concrete floor slab

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1986	0	MAR-09

A1030 Slab on Grade - 2002 Section*

Concrete floor slab

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2002	0	MAR-09

			wabasca - Desinarais - St. Theresa School (64751A)
A2020 Basement Walls (&	Crawl Spa	<u>ce) - 1961 Sec</u>	tion*
Dirt crawl space			
Rating 4 - Acceptable	Installed 1961	Design Life	Updated MAR-09
B1010.01 Floor Structural	Frame (Bui	Iding Frame)	- 1961 Section*
Wood beams and joists			
Rating 4 - Acceptable	Installed 1961	Design Life	Updated MAR-09
	1301	0	
B1010.02 Structural Interio	or Walls Su	pporting Floc	ors (or Roof) - 1961 Section*
Wood frame construction			
Rating		Design Life	
4 - Acceptable	1961	0	MAR-09
B1010.02 Structural Interio	or Walls Su	pporting Floo	ors (or Roof) - 1976 Section*
CMU walls throughout			
Rating	Installed	Design Life	Updated
4 - Acceptable	1976	0	MAR-09
B1010 02 Structural Interio	or Walls Su	pporting Floo	ors (or Roof) - 1986 Section*
CMU walls throughout		pporting 1100	
Rating	Installed	Design Life	lindated
4 - Acceptable	1986	0	MAR-09
B1010.02 Structural Interic	or Walls Su	pporting Floo	ors (or Roof) - 2002 Section*
CMU walls throughout			
<u>Rating</u> 5 - Good	Installed 2002	Design Life	Updated MAR-09
B1010.03 Floor Decks, Sla	bs, and To	ppings - 1961	Section*
Wood or plywood sub floor.			
<u>Rating</u>	Installed	Design Life	
4 - Acceptable	1961	0	MAR-09

B1010.05 Mezzanine Construction - 1961 Section*

Wood frame construction with plywood sub floor

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1961	0	MAR-09

B1010.05 Mezzanine Construction - 2002 Section*

HSS steel columns and CMU bearing walls, OWSJ with CIP concrete floor on steel deck

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
5 - Good	2002	0	MAR-09

B1010.07 Exterior Stairs - 1986 Section*

Three riser concrete steps and landing to north exit door and three riser presser treated steps and landing at east exit door.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	40	MAR-09

B1010.09 Floor Construction Fireproofing - 1961 Section*

Combustible construction, sprinklered.

Rating	Installed	Design Life	Updated
4 - Acceptable	1961	0	MAR-09

B1020.01 Roof Structural Frame - 1961 Section*

Wood Beams and joists with dimensional wood deck

Rating	Installed	Design Life	Updated
4 - Acceptable	1961	0	MAR-09

B1020.01 Roof Structural Frame - 1976 Section*

Steel beams and columns with OWSJ and steel Q deck

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-09

B1020.01 Roof Structural Frame - 1986 Section*

Steel beams and columns with OWSJ and steel Q deck

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	0	MAR-09

B1020.01 Roof Structural Frame - 2002 Section*

Steel beams and columns with OWSJ and steel Q deck

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

B1020.04 Canopies - 1961 Section*

Uncovered open web wood joists on steel frame on steel columns with brick veneer at front entrance

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	0	MAR-09

B1020.04 Canopies - 2002 Section*

Steel deck on HSS steel beam and columns over rear entrance

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	0	MAR-09

B1020.06 Roof Construction Fireproofing - 1961 Section*

Combustible construction, GWB in required areas.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1961	0	MAR-09

B1020.06 Roof Construction Fireproofing - 1976 Section*

Non-Combustible construction, GWB in required areas.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	1976	0	MAR-09

B1020.06 Roof Construction Fireproofing - 1986 Section*

Non-Combustible construction, GWB in required areas.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	1986	0	MAR-09

B1020.06 Roof Construction Fireproofing - 2002 Section*

Non-Combustible construction, GWB in required areas.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	0	MAR-09

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1961 Section*

Small brick veneer, air space, rigid insulation and vapour barrier.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1961	75	MAR-09

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1976 Section*

Small brick veneer, air space, rigid insulation and vapour barrier.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	75	MAR-09

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1986 Section*

Small brick veneer, air space, rigid insulation and vapour barrier.

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	75	MAR-09

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 2002 Section*

Small brick veneer, air space, rigid insulation and vapour barrier.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	2002	75	MAR-09

B2010.01.06.03 Metal Siding**

Steel siding on Z girts on rigid insulation on upper gym wall.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	40	MAR-09

Event: Replace Siding Panels - 431m2

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$74,000	Unassigned

Updated: MAR-09

B2010.01.09 Expansion Control: Exterior Wall Skin - 1962, 1976 & 1986*

Masonry control joints with rod and caulking. Sealant failing. Cost of replacement included in B2010.01.11 Joint Sealer

Rating	Installed	Design Life	Updated
2 - Poor	1986	0	MAR-09

B2010.01.09 Expansion Control: Exterior Wall Skin - 2002*

Masonry control joints with rod and caulking

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	0	MAR-09

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1962, 76, 86 Section**

Installed 1986 - 1962, 76 and 86 sections, sealant around windows doors and penetrations.

Rating	Installed	Design Life	Updated
2 - Poor	1986	20	MAR-09

Event: Replace sealants 400m

Concern:

Sealant failure (cohesive and adhesive failures observed) in control joints and around windows and doors. In addition, to sealant failure due to weathering on the 1961, 1976 and 1986 sections, an anti graffiti coating was applied in 2007 to the brick veneer on all additions, which has attacked the caulking causing wholesale failure where the materials have come in contact.

Recommendation:

Cut out sealants and grind brick veneer around windows and in control joints to prepare substrate. Install new backer rod and construction grade exterior sealant.

Consequences of Deferral:

Water entry into wall cavity and potential for water damage.

Туре	Year	Cost	Priority
Failure Replacement	2009	\$25,000	High

Updated: MAR-09

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 2002 Section**

Sealant around windows doors and penetrations. See B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1962, 1976, & 1986 Section** for event and life cycle replacement.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
2 - Poor	2002	20	MAR-09

B2010.02.05 Wood Framing : Ext. Wall Const. - 1961 Section*

Wood frame construction

Rating	Installed	Design Life	Updated
4 - Acceptable	1961	0	MAR-09

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1961 Section*

Vapour barrier with fiberglass cavity insulation.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1961	0	MAR-09

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation* 1976, 1986, & 2002 Sections

Exterior vapour barrier and rigid insulation on CMU walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-09

B2020.01.01.02 Aluminum Windows (Glass & Frame)** 1961, 76, 86

Commercial aluminum windows with double glazed insulated sealed units; fixed and fixed over venting units in classrooms. ANC room 102 has a large sliding windows installed in curved exterior wall.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	40	MAR-09

Event: Replace Aluminum Windows 45m2

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2026	\$89,200	Unassigned

Updated: MAR-09

Event: Replace Sliding window

Concern:

ANC room 102 in 86 addition has a large sliding window (2.1 x 2.1 m) that has failed and is not on it's tracks, the window was never properly installed and is not properly connected to the rough opening. It is extremely drafty and may be allowing water entry into the interstitial wall cavity.

Recommendation:

Remove and replace with a fixed window in aluminum frame and repair air seal connections to building envelope.

Туре	Year	Cost	Priority
Repair	2010	\$6,500	Low

B2020.01.01.02 Aluminum Windows (Glass & Frame)** 2002

Commercial aluminum windows with double glazed insulated sealed units; fixed and fixed over venting units in classrooms

Rating	Installed	Design Life	Updated
5 - Good	2002	40	MAR-09

Event: Replace Windows 33m2

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$60,000	Unassigned

Updated: MAR-09

B2020.01.01.02 Aluminum Windows (Glass & Frame)** Atrium

Triangle shaped, aluminum strip window frame, structural glazing under 6/12 pitch metal roof over library.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	40	MAR-09

Event: Replace glazing 36m2

Recommendation:

Replace sealed units when glazing fails

Туре	Year	Cost	Priority
Lifecycle Replacement	2026	\$35,000	Unassigned

B2030.01.02 Steel-Framed Storefronts: Doors**

All doors replaced in 2002 modernization. Painted steel frames with steel doors (with glass inserts) and sidelights on main doors.

Rating	Installed	Design Life	Updated
3 - Marginal	2002	30	MAR-09

Event: Replace Exterior Entrance Doors 13 panels

Туре	Year	Cost	<u>Priority</u>
Lifecycle Replacement	2032	\$42,000	Unassigned

Updated: MAR-09

Event: Replace gym doors - 2

Concern:

Gym doors have been damaged from abuse **Recommendation:** Replace doors and hardware.

Туре	Year	Cost	Priority
Repair	2010	\$3,500	Low

Updated: MAR-09

B2030.02 Exterior Utility Doors**

Steel doors in pressed steel frames at 3 locations.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	40	MAR-09

Event: Replace Utility Doors - 4 panels

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2042	\$6,900	Unassigned

Updated: MAR-09

B3010.01 Deck Vapor Retarder and Insulation - 1961 Section*

Type 2 vapour barrier and rigid insulation (unknown R value).

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	0	MAR-09

B3010.01 Deck Vapor Retarder and Insulation - 1976 Section*

Type 2 vapour barrier and rigid insulation (unknown R value).

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1976	0	MAR-09

B3010.01 Deck Vapor Retarder and Insulation - 1986 Section*

Type 2 vapour barrier and rigid insulation (unknown R value).

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	0	MAR-09

B3010.01 Deck Vapor Retarder and Insulation - 2002 Section*

Type 2 vapour barrier and rigid insulation (unknown R value).

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	0	MAR-09

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)** 1976

Section of 1976 roof area replaced in 1995.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	25	MAR-09

Event: Repair blisters and ridges

Concern:

1976 section asphalt and gravel membrane has ridges and blisters starting to develop over the roof section. **Recommendation:** Repair blisters and ridges and fill gum boxes. **Consequences of Deferral:** Increased costs for repair.

Туре	Year	Cost	Priority
Repair	2010	\$5,000	Low

Updated: MAR-09

Event: Replace Roofing 780m2

Туре	Year	Cost
Lifecycle Replacement	2020	\$210,00

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Priority Unassigned

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** 1961& 1976

SBS roofing on rigid insulation. All of 1961 and a section of 1976 re-roofed in approximately 1996.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1996	25	MAR-09

Event: Replace SBS Roofing - 1140m2

TypeYearCostPriorityLifecycle Replacement2021\$306,000Unassigned

Updated: MAR-09

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)** 2002 Section

Two ply torch applied SBS membrane on 2002 addition (Gymnasium and hallway)

Rating	Installed	Design Life	Updated
5 - Good	2002	25	MAR-09

Event: Replace Roofing 980m2

Туре	Year	Cost	Priority
Lifecycle Replacement	2027	\$264,000	Unassigned

Updated: MAR-09

B3010.04.08 Membrane Roofing (Inverted/ Protected)** 1986

4 ply asphalt membrane on steel deck with rigid insulation and gravel ballast.

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	30	MAR-09

Event: Replace Roofing 500m2

Recommendation:

Roof is expected to fail within 2-3 years based on industry experience with 4 ply inverted roof assemblies.

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2016	\$134,500	Unassigned

B3010.07 Sheet Metal Roofing**

Sloped metal roofing over library and ANC in 1986 additions and sloped mansard section around 2002 gym roof.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	25	MAR-09

Event: Replace Metal Roofing 432m2

TypeYearCostPriorityLifecycle Replacement2027\$136,000Unassigned

Updated: MAR-09

B3020.01 Skylights**

One acrylic 2.6m dome skylight over kitchen in 1986 addition. 3 - 1.5m acrylic pyramidal skylights over hallway by gym

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	25	MAR-09

Event: Replace skylight - 1

Туре	Year	Cost	Priority
Lifecycle Replacement	2021	\$6,000	Unassigned

Updated: MAR-09

B3020.02 Other Roofing Openings (Hatch, Vent, etc) All Sections

Chimneys, exhaust fans, plumbing vents, gas and electrical penetrations, roof top HVAC units. Roof access from mechanical mezzanine in 2002 gym.

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	0	MAR-09

B3020.02.03 Roof Windows (Clearstory)

Small fixed frame aluminum units on upper wall of small gym.

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	0	MAR-09

S3 INTERIOR				
C1010.01.03 Unit Masonry	Assemblie	s: Partitions -		
Concrete block construction	i in 76, 86 ai	nd 2002 additi	ns	
Rating 4 - Acceptable	Installed 1976	Design Life 0	Updated MAR-09	
C1010.01.07 Framed Partit	tions (Stud)	<u>) -</u>		
Frame construction in 1961	building			
Rating 4 - Acceptable	Installed 1961	Design Life 0	Updated MAR-09	
C1010.02 Interior Demoun	table Partit	ions*		
Steel stud with vinyl covered	d GWB parti	tions in library	and some classroo	ms.
<u>Rating</u> 5 - Good	Installed 2002	Design Life 50	<mark>Updated</mark> MAR-09	
C1010.05 Interior Window	<u>s - *</u>			
Single pane safety glass in	steel frames	s in various loc	tions.	
Rating 4 - Acceptable	Installed 2002	Design Life 0	<u>Updated</u> MAR-09	
C1010.06 Interior Glazed F	Partitions a	nd Storefronts	<u>- *</u>	
Steel frame with glass and s	spandrel par	nels on main o	ices	
<u>Rating</u> 5 - Good	Installed 2002	Design Life 0	Updated MAR-09	
C1010.07 Interior Partition	Firestoppi	<u>ng - *</u>		
Mineral wool and fire caulking	ng where ob	served.		
<u>Rating</u> 5 - Good	Installed 2002	Design Life 0	Updated MAR-09	
C1020.01 Interior Swingin	g Doors (&	Hardware) - *		
Wood with glass inserts and	d steel doors	s in steel frame	s throughout with s	tandard brushed chrome hardware
Rating 5 - Good	Installed 2002	Design Life 40	<u>Updated</u> MAR-09	

C1020.03 Interior Fire Doors - *

Fire doors in hallways on magnetic release and storage room doors

Rating	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

C1020.05 Interior Large Doors - *

Stainless steel security roll-up grilles in office and kitchen

Rating	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

C1030.01 Visual Display Boards**

White and tack boards throughout

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	20	MAR-09

Event: Replace Visual Display Boards - 68

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2022	\$35,000	Unassigned

Updated: MAR-09

C1030.01 Visual Display Boards** Electronic

Computerized "smart" boards in classrooms

Rating	Installed	Design Life	Updated
5 - Good	2002	20	MAR-09

Event: Replace Smart Boards - 11

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2022	\$49,500	Unassigned

				wabasca - Desmarais	- St. Theresa School (E	5475
<u>C1030.0</u>	2 Fabricated Compart	ments(T	oilets/Showe	ers) - **		
Painted	steel stall enclosures in	bathroor	ms and showe	ers		
<u>Rating</u> 5 - Good		stalled 2002	Design Life 30	Updated MAR-09		
Event:	Replace Toilets/Show (10 shower)	ver Comj	partments - (<u>21 w/c)</u>		
	Type Lifecycle Replacement	<u>Yea</u> 2032	r <u>Cost</u> \$67,000	<u>Priority</u> Unassigned		
	Updated: MAR-09					
<u>C1030.0</u>	8 Interior Identifying D)evices -	*			
Room id	entification, exit signage	e				
Rating 5 - Good		stalled 2002	Design Life 0	Updated MAR-09		
<u>C1030.1</u>	0 Lockers - **					
Half lock	ers in hallways and 300)mm high	in change ro	ooms.		
<u>Rating</u> 5 - Good		stalled 2002	Design Life 30	Updated MAR-09		
<u>Event:</u>	Replace Lockers Recommendation: 61 full size; 244 double <u>Type</u> Lifecycle Replacement	e locker, ⁻ <u>Yea</u> 2032	<u>r Cost</u>	h 300 mm type. <u>Priority</u> Unassigned		
	Updated: MAR-09					
<u>C1030.1</u>	2 Storage Shelving - *					
Wood - I	Fixed and adjustable sh	elves				
<u>Rating</u> 4 - Accep		stalled 2002	Design Life 0	Updated MAR-09		
	4 Toilet, Bath, and Lau					
				aper and soap dispensers.		
<u>Rating</u> 5 - Good		stalled 2002	Design Life 0	Updated MAR-09		

C3010.06 Tile Wall Finishes - **

Boys washrooms

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	40	MAR-09

Event: Replace Tile Wall Finishes 106m2

Туре	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2042	\$37,100	Unassigned

Updated: MAR-09

C3010.11 Interior Wall Painting - *

Painted GWB and block throughout

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	2002	10	MAR-09

C3010.12 Wall Coverings - *

Vinyl covered GWB on demountable partitions

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	1961	15	MAR-09

C3010.14 Other Wall Finishes*

Brick veneer in hallways and walls sections where new sections have been added.

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	0	MAR-09

C3020.01.02 Paint Concrete Floor Finishes - *

Mechanical room

Rating	Installed	Design Life	Updated
5 - Good	2002	10	MAR-09

	Wabasca - Desmarais - St. Theresa School
C3020.02 Tile Floor Finishes - **	
Ceramic tile in washrooms, showers and kitchen.	
RatingInstalledDesign Life5 - Good200250	<u>Updated</u> MAR-09
Event: Replace Tile Floor Finishes 226m2	
TypeYearCostLifecycle Replacement2052\$55,600	Priority Unassigned
Updated: MAR-09	
C3020.04 Wood Flooring**	
Hardwood sports floor in gym	
RatingInstalledDesign Life5 - Good200230	Updated MAR-09
Event: Refinish Gym Floor 430m2	
TypeYearCostLifecycle Replacement2032\$25,000	Priority Unassigned
Updated: MAR-09	
C3020.07 Resilient Flooring - ** 1961, 1976 & 1986	
VC Tile replaced in 1986 in older sections.	
RatingInstalledDesign Life4 - Acceptable198620	Updated MAR-09
Event: Replace Resilient Flooring 1005m2	
	Priority
TypeYearCostLifecycle Replacement2012\$74,000	Unassigned
Updated: MAR-09	
C3020.07 Resilient Flooring** 2002	
Sheet linoleum installed in 2002 addition and various	locations in older sections.
RatingInstalledDesign Life5 - Good200220	Updated MAR-09
Event: Replace Resilient Flooring 2200m2	

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2022	\$259,000	Unassigned

Updated: MAR-09

Report run on: March 19, 2009 12:01 PM

C3020.08 Carpet Flooring - ** 1961, 1976 & 1986

Carpet in classrooms and offices

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1986	15	MAR-09

Event: Replace Carpet Flooring 87m2

Concern: Carpet beginning to break down and is nearing end of serviceable life. **Recommendation:** Replace with new heavy traffic carpet

Туре	Year	Cost	Priority
Failure Replacement	2010	\$6,600	Low

Updated: MAR-09

C3020.08 Carpet Flooring** 2002

Carpet in classrooms and offices

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2002	15	MAR-09

Event: Replace Carpet - 90m2

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2017	\$6,800	Unassigned

Updated: MAR-09

T bar ceiling in classrooms, hallways and offices.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2002	25	MAR-09

Event: Replace Susp.T-Bar - 2716m2

Туре	Year	Cost	Priority
Lifecycle Replacement	2027	\$147,000	Unassigned

Updated: MAR-09

C3030.07 Interior Ceiling Painting - *

GWB and exposed steel deck in various locations

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	20	MAR-09

S4 MECHANICAL

D2010.04 Sinks - ** Twenty-three (23) stainless steel sinks in classrooms Six (6) 3-lav automated basin sinks in washrooms Five (5) stainless steel washroom sinks (staff) One (1) vitreous china sink

Rating	Installed	Design Life	Updated
6 - Excellent	2002	30	MAR-09

Event: Replace Sinks

Recommendation:

Replace all sinks in the facility.

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2032	\$62,800	Unassigned

Updated: MAR-09

D2010.05 Showers - **

Four (4) fiberglass shower stalls with shower heads and mixing valves.

Rating	Installed	Design Life	Updated
6 - Excellent	2002	30	MAR-09

Event: Replace Showers

Recommendation:

Replace four (4) fiberglass shower stalls, shower heads and valve sets.

<u>Type</u> Lifecycle Replacement

<u>Year</u> <u>Cost</u> 2032 \$14,200 Priority Unassigned

D2010.08 Drinking Fountains / Coolers - **

Six (6) wall cabinet refrigerated drinking fountains Two (2) wall hung refrigerated drinking fountains

Rating	Installed	Design Life	Updated
6 - Excellent	2002	35	MAR-09

Event: Replace Drinking Fountains / Coolers

Recommendation:

Replace all eight (8) drinking fountains (stainless steel, refrigerated)

Туре	Year	Cost	Priority
Lifecycle Replacement	2037	\$38,100	Unassigned

Updated: MAR-09

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1986

Ten (10) wall mounted water closets with flush valves Four (4) floor mounted urinals with flush valves

Rating	Installed	Design Life	Updated
4 - Acceptable	1986	35	MAR-09

Event: Replace Washroom Fixtures (WC, Lav, Urnl)

Recommendation:

Replace Ten (10) wall mounted Wcs and flush valves and four (4) floor mounted urinals with flush valves.

<u>Type</u> Lifecycle Replacement <u>Year</u> <u>Cost</u> 2021 \$35,100 <u>Priority</u> Unassigned

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 2002

Thirteen (13) tank-type water closets Four (4) wall mounted urinals with automated flush valves Twelve (12) automated lavatory valves in basin style fiberglass sinks (3 per sink)

Rating	Installed	<u>Design Life</u>	Updated
6 - Excellent	2002	35	MAR-09

Event: Replace Washroom Fixtures (WC, Lav, Urnl) - 2002

Recommendation:

Replace washroom fixtures throughout the building.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2037	\$46,400	Unassigned

Updated: MAR-09

D2020.01.01 Pipes and Tubes: Domestic Water - *

Soldered copper piping at fixtures and cast iron mains with victaulic fittings

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	0	MAR-09

D2020.01.02 Valves: Domestic Water - **

Brass mains shutoff valve in sprinkler tree room and distributed valves throughout the building (approximately 20)

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	1986	40	MAR-09

Event: Replace Valves: Domestic Water

Recommendation:

Replace domestic water valves throughout the building (approximately 20) and main isolation screw valves (2).

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2026	\$31,100	Unassigned

Updated: MAR-09

D2020.01.08 Hose Bibbs*

Hose bibs around building exterior (four [4])

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	1986	0	MAR-09

D2020.02.02 Plumbing Pumps: Domestic Water - **

1/3 hp HW circulation pump

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	20	MAR-09

Event: Replace Plumbing Pumps: Domestic Water

Туре	<u>Year</u>	<u>Cost</u>	Priority
Lifecycle Replacement	2022	\$1,200	Unassigned

Updated: MAR-09

D2020.02.06 Domestic Water Heaters - **

Four (4) A.O Smith 65gal, 266gal/hr domestic hot water heaters.

Rating	Installed	Design Life	Updated
6 - Excellent	2008		MAR-09
	Capacity 250		ity Unit tre

litre

Event: Replace Domestic Water Heaters

Recommendation:

Replace four (4) 65gal/266gal/hr domestic hot water heaters

Туре	Year	Cost	Priority
Lifecycle Replacement	2028	\$28,000	Unassigned

Updated: MAR-09

D2020.03 Water Supply Insulation: Domestic - *

Fiberglass pipe insulation

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	2002	0	MAR-09

D2030.01 Waste and Vent Piping - *

Sanitary grade glued ABS pipe and sealed rooftop plumbing vents

Rating	Installed	<u>Design Life</u>	Updated
6 - Excellent	2002	0	MAR-09

D2040.01 Rain Water Drainage Piping Systems - *

PVC drain pipes

Rating	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

D2040.02.04 Roof Drains - *

Cast iron gravel guards

Rating	Installed	Design Life	Updated
5 - Good	1961	40	MAR-09

D3010.02 Gas Supply Systems - *

Welded cast iron piping

Rating	Installed	Design Life	Updated
5 - Good	2002	60	MAR-09

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

Four (4) RBI Category 1, natural gas hot water boilers (270.6kW), Two (2) 7.5hp boiler water circulators, insulated steel piping with Gruvlok fittings, expansion tank and 12" check valves on pumps.

Rating	Installed	Design Life	Updated
3 - Marginal	2002	35	MAR-09

Event: Repair Based on Study

Concern:

Currently, of the four available boilers, only two operate at any given time due to backdraft issues in the boiler room. Additional combustion air capacity was added to the space in approximately 2006, but the problem persists. Backdraft results in combustion gasses filling the mechanical room and adjacent hallways and classrooms. Operating only two boilers will result in peak operation more frequently than anticipated and rapid deterioration and maintenance of the boilers.

Recommendation:

Based on results of study add a powered fan to pressurize room. Adjustment to chimney heights may be also required.

Туре	Year	Cost	Priority
Repair	2010	\$5,000	High

Updated: MAR-09

Event: Replace Heating Boilers and Accessories: H.W.

Recommendation:

Replace four (4) 270kW natural gas boilers and accessories (pumps, valves, piping and expansion tank).

Туре	Year	Cost	Priority
Lifecycle Replacement	2037	\$192,200	Unassigned

Updated: MAR-09

Event: Study for Heating Boilers Backdraft

Concern:

Currently, of the four available boilers, only two operate at any given time due to backdraft issues in the boiler room. Additional combustion air capacity was added to the space in approximately 2006, but the problem persists. Backdraft results in combustion gasses filling the mechanical room and adjacent hallways and classrooms. Operating only two boilers will result in peak operation more frequently than anticipated and rapid deterioration and maintenance of the boilers.

Recommendation:

A study should be conducted to determine the cause of the backdraft from the boilers. The study should include an air balance on the mechanical room with all four boilers operating.

	Type Study	Yea 2009		Priority Unassigned
	Updated: MAR-09			
D3020.0)2.02 Chimneys (&C	omb. Air): I	I.W. Boiler -	<u>_ **</u>
Four (4)	insulated metal chin	nney stacks	through the r	roof and two (2) galvanized metal combustion air ducts.
<u>Rating</u> 4 - Accep	otable	Installed 2002	Design Life 30	<u>Updated</u> MAR-09
<u>Event:</u>	Replace Chimneys Recommendation: Replace four (4) ch combustion air duct	imney stack	s and two (2)	2) galvanized metal
	Type Lifecycle Replacemer		r <u>Cost</u> \$31,400	Priority Unassigned
	Updated: MAR-09			
D3020.0	02.03 Water Treatme	ent: H. W. B	oiler - *	
Chemica	al pot feeder			
<u>Rating</u> 5 - Good		Installed 2002	Design Life 0	MAR-09
D3030.0	6.01 Refrigeration	Compresso	rs - **	
Two (2)	refrigerant compress	ors in mech	anical penthe	nouse (rm 201) serving commercial kitchen refrigerator and freezer
<u>Rating</u> 5 - Good		Installed 2002	Design Life 15	MAR-09
Event:	Replace Refrigerat	tion Compre	essors	
	Recommendation: Replace two (2) refrigeration		compress	sors for kitchen
	Type Lifecycle Replacemer Updated: MAR-09	Yea nt 2017		<u>Priority</u> Unassigned

				masaooa	Desiliarais	
D3030.06	6.02 Refrigerant Co	ondensing U	<u>nits - **</u>			
Two (2) a	air cooled condensir	ng units in me	chanical pe	nthouse (rm 2	01)	
<u>Rating</u> 5 - Good		<u>Installed</u> 2002	Design Life 25	<u>Updated</u> MAR-09		
	Replace Refrigera Recommendation: Replace two (2) air					
	<u>Type</u> Lifecycle Replacemer Updated: MAR-09		<u>Cost</u> \$16,000	<mark>Prio</mark> Unas	<u>rity</u> ssigned	
D3040.0 1	I.01 Air Handling L	Inits: Air Dis	tribution - *	**		
Two (2) 7	2,000cfm Engineer 7,500cfm Engineere 8,600cfm Engineere	d Air units wit	th glycol hea	ating coils		
<u>Rating</u> 6 - Excelle	ent	Installed 2002	Design Life 30	Updated MAR-09		
	Replace Air Handl Recommendation: Replace eight (8) E			on		
	Type Lifecycle Replacemer		<u>Cost</u> \$110,000	Prio Unas	rity ssigned	
	Updated: MAR-09					
	I.04 Ducts: Air Dis	tribution - *				
	city ductwork	la stalla d		l la dete d		
Rating 6 - Excelle	ent	Installed 2002	0 0 0	Updated MAR-09		
D3040.01	I.07 Air Outlets & I	nlets:Air Dis	tribution - *			
Single de	flection grilles, lami	nar flow grille	s and round	l cone diffusei	S	
Rating 6 - Excelle	ent	Installed 2002	Design Life 0	Updated MAR-09		

D3040.03.01 Hot Water Distribution Systems - **

Two (2) 4hp circulators for glycol heating loop, two (2) check valves, four (4) expansion fittings, four (4) isolation ball valves, insulated steel piping, copper branch piping

Rating	Installed	Design Life	Updated
6 - Excellent	2002	40	MAR-09

Event: Replace Hot Water Distribution Systems

Recommendation:

Replace hot water distribution system

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$60,600	Unassigned

Updated: MAR-09

D3040.04.01 Fans: Exhaust - **

Ten (10) rooftop exhaust fans with variable speed drives for washrooms and administration areas One (1) fume hood in the science lab

<u>Rating</u>	Installed	Design Life	Updated
6 - Excellent	2002	30	MAR-09

Event: Replace Fans: Exhaust

Recommendation:

Replace all rooftop exhaust fans (ten [10]) and the fume hood fan in the science lab

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$20,100	Unassigned

Updated: MAR-09

D3040.04.03 Ducts: Exhaust - *

Circular accordion ducts and galvanized ductwork

Rating	Installed	Design Life	Updated
6 - Excellent	2002	0	MAR-09

D3040.04.05 Air Outlets and Inlets: Exhaust - *

Egg crate grilles

Rating	Installed	Design Life	Updated
6 - Excellent	2002	0	MAR-09

D3040.05 Heat Exchangers**

Water to glycol shell and tube heat exchanger

Rating	Installed	<u>Design Life</u>	Updated
6 - Excellent	2002	30	MAR-09

Event: Replace Heat Exchanger

Recommendation:

Replace shell and tube heat exchanger

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2032	\$19,500	Unassigned

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

Seven (7) Carrier rooftop packaged air handling units with 27kW natural gas burners and built-in refrigerant condensing coils serving the 2002 portable classrooms

Rating	Installed	Design Life	Updated
4 - Acceptable	2002	30	MAR-09

Event: Install Wind Block

Concern:

Since commissioning of the rooftop units in 2002, the units have required higher than normal maintenance during the heating season. The cause of the continuous maintenance is likely the high winds off the lake and subsequent extreme winter temperatures. Malfunction of multiple units during the winter months could result in mechanical failure and severe damage to the portable classrooms. In addition, maintenance staff have problems maintaining the units during the winter due to the high winds and extreme temperatures.

Recommendation:

To improve the operation and maintenance of the packaged rooftop units, wind blocks are proposed on the North side of the all seven units. The wind blocks should be pressure treated lumber, heavy guage or steel siding, and properly secured to the portable classroom roofs. Wind blocks will prevent high winds from extinguishing pilot lights and provide some shelter to maintenance staff servicing the units.

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2009	\$15,000	Unassigned

Updated: MAR-09

Event: Replace Packaged Rooftop Air Conditioning Units (& Heating Units)

Recommendation:

Replace seven (7) packaged rooftop air handling units with 32kW burners and 5ton cooling capacity

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$316,700	Unassigned

	2 Air Coils - **		
	ed glycol reheat coils at classroom branches before diffusers (approximately sixteen [16]) eating coils in eight (8) air handling units		
<u>Rating</u> 6 - Excelle	ent <u>Installed</u> <u>Design Life</u> <u>Updated</u> 30 MAR-09		
Event:	Replace Air Coils		
F	Recommendation: Replace sixteen (16) reheat coils in classrooms and eight (8) heating coils in air handling units		
-	TypeYearCostPriorityLifecycle Replacement2032\$208,100Unassigned		
l	Updated: MAR-09		
D3050.03	3 Humidifiers - **		
Small stea	am generator for humidification that is never used.		
<u>Rating</u> 6 - Excelle	ent 1986 25 MAR-09		
Event:	Replace Humidifiers		
	Recommendation: Replace steam humidifier		
	TypeYearCostPriorityLifecycle Replacement2015\$15,300Unassigned		
I	Updated: MAR-09		
D3050.05	5.02 Fan Coil Units - **		
	(13) force flow cabinets in all entrances to the building		
<u>Rating</u> 4 - Accepta	able 1986 30 MAR-09		
Event:	Replace Fan Coil Units		
Recommendation: Replace thirteen (13) force flow cabinets in the entrances			
	TypeYearCostPriorityLifecycle Replacement2016\$12,400Unassigned		

Finned tube radiation in certain areas (staff room, gymnasium etc).

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1986	40	MAR-09

Event: Replace Finned Tube Radiation

Recommendation:

Replace finned tube radiation in staff room and gymnasium (approximately 40m)

Туре	Year	Cost	Priority
Lifecycle Replacement	2026	\$23,700	Unassigned

Updated: MAR-09

D3050.05.06 Unit Heaters**

Three (3) unit heaters in the boiler room and mechanical penthouses (fan rooms)

Rating	Installed	Design Life	Updated
6 - Excellent	2002	30	MAR-09

Event: Replace Unit Heaters

Recommendation:

Replace three (3) unit heaters (two (2) 16kW units and one (1) 53kW unit)

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$16,600	Unassigned

Updated: MAR-09

D3050.05.08 Radiant Heating (Ceiling & Floor)**

Radiant ceiling panels throughout classrooms and administration areas

Rating	Installed	Design Life	Updated
6 - Excellent	2002	35	MAR-09

Event: Replace Radiant Heating (Ceiling & Floor)

Recommendation:

Replace radiant ceiling panels

Туре	<u>Year</u>	Cost	Priority
Lifecycle Replacement	2037	\$35,800	Unassigned

2.01 Electric and	Electronic Co	ontrols**	
gital zone control tl	nrough BMS.	Digital and e	lectronic thermostats throughout the building.
otable	Installed 2002	Design Life 30	Updated MAR-09
Recommendation	า:		ermostats, motor
	ent 2032		<u>Priority</u> Unassigned
2.05 Building Sys	tems Control	ls (BMCS, El	MCS)**
tic Controls internet	based buildir	ng manageme	ent system
Recommendation Replace building r <u>Type</u> Lifecycle Replaceme	n: nanagement s <u>Yea</u> ent 2020	system <u>r Cost</u>	<u>S, EMCS)</u> <u>Priority</u> Unassigned
Sprinklers: Fire Pro	otection - *		
rs throughout the b	uilding. Sprin	kler tree in w	rater mains connection room
lent	Installed 2002	Design Life 60	Updated MAR-09
1 Fire Extinguishe	er, Cabinets a	and Accesso	pries - *
extinguishers thro	ughout buildin	ig. Duct type	smoke detectors on return air system.
	Installed 2002	Design Life 30	<u>Updated</u> MAR-09
	igital zone control the otable Replace Electrom Recommendation Replace direct de starters etc.) Type Lifecycle Replaceme Updated: MAR-09 2.05 Building Sys tic Controls internet lent Replace Building Recommendation Replace Building Sys tic Controls internet lent Lifecycle Replacemed Updated: MAR-09 Sprinklers: Fire Pro rs throughout the b lent Partice Extinguished	gital zone control through BMS. bable Installed 2002 Replace Electronic Controls** Recommendation: Replace direct digital controls starters etc) Type Yea Lifecycle Replacement 2032 Updated: MAR-09 2.05 Building Systems Control tic Controls internet based buildin Lifecycle Replacement 2002 Replace Building Systems Control tic Controls internet based buildin Replace Building Systems Control tic Controls internet based buildin Lifecycle Replacement 2002 Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. Sprinklers: Fire Protection - * rs throughout the building. rs throughout building.	Installed 2002 Design Life 30 Replace Electronic Controls** Recommendation: Replace direct digital controls (digital the starters etc) Image: Cost 2032 Image: Cost 99,400 Image: Im

D4090.03 Clean Agent Extinguishing Systems**

Range Guard Karbaloy fire suppression system for kitchen range hood.

Rating	Installed	<u>Design Life</u>	Updated
6 - Excellent	2002	40	MAR-09

Event: Replace Clean Agent Extinguishing Systems

Recommendation:

Replace Range Guard Karbaloy kitchen range hood fire suppression system

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$17,600	Unassigned

S5 ELECTRICAL

D5010.03 Main Electrical Switchboards (Main Distribution) - ** - 2002

Main switchboard is 1200 amp, 120/208 volts, 3 phase, 4 wire manufactured by Federal Pioneer. Switchboard consist of main breaker, line section, metering cabinet, surge suppressor and CDP.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2002	40	MAR-09

Event: Replace Main Electrical Switchboards

Туре	Year	Cost	Priority
Lifecycle Replacement	2042	\$70,000	Unassigned

Updated: MAR-09

D5010.03 Main Electrical Switchboards (Main Distribution)** - 1986

Switchboard is 200 amps, 120/208 volts, 3 phase, 4wire consists of main breaker, metering cabinet and MDP2 manufactured by Westinghouse Canada Limited. Switchboard located in room 108.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	1986	40	MAR-09

Event: Replace Switchboard

Туре	Year	Cost	Priority
Lifecycle Replacement	2026	\$39,000	Unassigned

Updated: MAR-09

D5010.03 Main Electrical Switchboards (Main Distribution)** - 1976

Switchboard is 600 amps, 120/208 volts, 3 phase, 4 wire consists of main breaker, metering cabinet and MDP2 manufactured by Federal Pioneer. Located in room 155.

Rating	Installed	Design Life	Updated
4 - Acceptable	1976	40	MAR-09

Event: Replace Electrical Switchboard

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$39,000	Unassigned

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - ** - 1976

3 panels installed in 1976 manufactured by Federal Pioneer. Panel capacity is good.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-09

Event: Replace Panelboards (3)

TypeYearCostPriorityLifecycle Replacement2012\$18,500Unassigned

Updated: MAR-09

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 1986

4 panels, 1 with two tubs installed in 1986 manufactured by Westinghouse Canada Inc. Panel capacity is good.

Priority Unassigned

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1986	30	MAR-09

Event: Replace Panels (5)

Туре	Year	Cost	Priority
Lifecycle Replacement	2016	\$30,000	Unassigned

Updated: MAR-09

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 2002

7 Panels, 2 with two tubs manufactured by Federal Pioneer.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	2002	30	MAR-09

Event: Replace Panels (9)

Туре	Year	Cost
Lifecycle Replacement	2032	\$55,400

D5010.07.01 Switchboards, Panelboards, and (Motor) Control Centers**

Motor control center Model 6 with 3 sections manufactured by Square D; 3 phase, 60 HZ, 600 amp horizontal and 300 amp vertical. MCC located in 2002 Mechanical room.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2002	30	MAR-09

Event: Replace Motor Control

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$33,800	Unassigned

Updated: MAR-09

D5010.07.02 Motor Starters and Accessories - **

Approximately 6 stand alone motor starters provided throughout.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	1986	30	MAR-09

Event: Replace Motor Starters and Accessories (6)

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$10,000	Unassigned

Updated: MAR-09

D5020.01 Electrical Branch Wiring - *

Combination of Teck conduit, emt conduit and bx cable provided throughout the school. Majority of the branch wiring from 2002 modernization and some branch wiring from 1986 modernization. Adequate receptacles provided throughout the school. Building operator noted no problem with branch wiring.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	0	MAR-09

D5020.02.01 Lighting Accessories (Lighting Controls) - *

Standard line voltage switches. Some are new in 2002.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	1986	0	MAR-09

D5020.02.02.01 Interior Incandescent Fixtures - *

Interior incandescent lamp type fixtures have been retro-fitted with compact florescent.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2002	30	MAR-09

D5020.02.02.02 Interior Florescent Fixtures - **

Approximately 400 Interior florescent fixture consists of 2'X4', 1'X4' and strip light provided throughout. Interior florescent fixtures were new in 2002.

Rating	Installed	Design Life	Updated
5 - Good	2002	30	MAR-09

Event: Replace Interior Florescent Fixtures (400)

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$200,000	Unassigned

Updated: MAR-09

D5020.02.02.05 Other Interior Fixtures - *

Pot lights provided on the corridors and in the architectural ceiling by the gymnasium in the 2002 addition. Building operator noted that the area by the gymnasium is dimmed in the morning.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	0	MAR-09

D5020.02.03.02 Emergency Lighting Battery Packs - **

Approximately 15 emergency lighting battery packs with remote heads provided throughout the school.

Rating	Installed	Design Life	Updated
5 - Good	2002	20	MAR-09

Event: Replace Emergency Lighting Battery Packs (15)

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$22,000	Unassigned

Updated: MAR-09

D5020.02.03.03 Exit Signs - *

LED type exit signage provided throughout exit pathways.

Rating	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

D5020.02.05 Special Purpose Lighting - *

Spot light type fixture with flood lights provided in the music/drama room.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	0	MAR-09

D5020.03.01.04 Exterior H.P. Sodium Fixtures - *

Pole and wall mounted high pressure sodium provided around the perimeter of the school.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	2000	0	MAR-09

D5020.03.02 Lighting Accessories: Exterior (Lighting Controls) - *

Exterior lights control via photo electric cell and lighting contactor.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

D5030.01 Detection and Fire Alarm - **

Notifier AFP-200 Intelligent fire detection and alarm system. Fire alarm control panel located in 1976 addition electrical room and Fire alarm Annunciator located by the administration office. Approximately 60 fire alarm devices such as heat/smoke detector, horn/strobe lights and manual pull station provided throughout.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2002	25	MAR-09

Event: Replace Detection and Fire Alarm

Туре	Year	Cost	Priority
Lifecycle Replacement	2027	\$49,800	Unassigned

Updated: MAR-09

D5030.02.02 Intrusion Detection - **

DSC security system, control keypad located by the Administration office. Motion detector provided throughout.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	25	MAR-09

Event: Replace Intrusion Detection

Туре	Year	Cost	Priority
Lifecycle Replacement	2027	\$17,000	Unassigned

<u>D5030.0</u>	2.04 Video Surveilla	ance - **		
Panasor	nic camera surveillan	ce provideo	d throughout,	10 cameras.
<u>Rating</u> 5 - Good		Installed 2002	Design Life 25	Updated MAR-09
Event:	Replace Video Sur	veillance		
	Type Lifecycle Replacemen	t 202		<u>Priority</u> Unassigned
	Updated: MAR-09			
D5030.0	3 Clock and Progra	m Systems	<u>s - *</u>	
Battery	operated time clock p	provided thr	oughout.	
<u>Rating</u> 5 - Good		Installed 2002	Design Life 25	Updated MAR-09
<u>D5030.0</u>	04.01 Telephone Sys	stems - *		
Telecor	XL administrative co	mmunicatio	n system inte	grated with PA system.
<u>Rating</u> 5 - Good		Installed 2002	Design Life 25	Updated MAR-09
<u>D5030.0</u>	04.05 Local Area Net	twork Syst	<u>ems - *</u>	
Alberta	Supernet, Cat5e cat	le througho	out.	
<u>Rating</u> 5 - Good		Installed 2002	Design Life 0	<u>Updated</u> MAR-09
D5000 0				
	<u>)5 Public Address a</u>			
				th TOA 900 series amplifier. PA system integrated with telephone nusic system is TOA 900 series with wireless devices.
<u>Rating</u> 5 - Good		Installed 2002	Design Life 20	Updated MAR-09
Event:	Replace Public Ad	dress and	Music Syster	<u>ms</u>
	Type Lifecycle Replacemen	Yea ot 202		<u>Priority</u> Unassigned
	Updated: MAR-09			

D5030.06 Television Systems - *

Close Circuit TV system with modular PICO CATV series. Classrooms have TV/DVD/VCR racks suspended from brackets mounted to the walls or tied down on carts.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2000	0	MAR-09

D5090.06 Lightning Protection Systems - *

Surge Guard Suppressor manufactured by Federal Pioneer.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	0	MAR-09

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment - *

Book shelves, audio/visual equipment, tables and chairs

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	0	MAR-09

E1020.03 Theater and Stage Equipment*

Spot lights in gym rafters

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2002	25	MAR-09

E1020.07 Laboratory Equipment - *

Counter top fume hood reported not functional - requires repair. Standard science room supplies.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1986	0	MAR-09

E1090.03 Food Service Equipment - *

Full commercial kitchen with stainless steel counter and dishwasher, dual oven range, bake ovens, deep fryer, draft hood with fire suppression, walk in cooler and freezer.

<u>Rating</u>	Installed	Design Life	<u>Updated</u>
5 - Good	1986	0	MAR-09

E1090.04 Residential Equipment - *

Refrigerator, stoves, microwaves in staff room and canteen

Rating	Installed	Design Life	Updated
5 - Good	2002	0	MAR-09

E1090.07 Athletic, Recreational, and Therapeutic Equipment - *

Folding and winch operated backboards, electronic scoreboard, various loose equipment.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	0	MAR-09

E2010.02 Fixed Casework - **

Wood cabinets with laminate tops in classrooms and offices, kitchen cabinets in staff room and canteen.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	35	MAR-09

Event: Replace Fixed Casework 4200m2/gfa

TypeYearCostPriorityLifecycle Replacement2037\$496,400Unassigned

Updated: MAR-09

E2010.03.01 Blinds - **

Horizontal aluminum blinds throughout

Rating	Installed	Design Life	Updated
5 - Good	2002	30	MAR-09

Event: Replace Blinds 80m2

Туре	Year	Cost	Priority
Lifecycle Replacement	2032	\$12,000	Unassigned

Updated: MAR-09

F1010.02.04 Portable and Mobile Buildings - *

7 re-locatable classrooms and common hallway along east elevation installed with hard tie-ins to exterior wall and roof control joints in 2002. Screw pile foundation with crawlspace, wood frame construction, with steel siding, vinyl windows, SBS roofing and one acrylic skylight per unit and rooftop HVAC. Interior finishes sheet linoleum in classroom and hallway, painted GWB, Susp.T bar ceiling, wood built in shelves in classroom and cloakroom at front, white board and tack boards in each. Units are in good condition.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	0	MAR-09

F2020.01 Asbestos - *

Hazmat report completed in 2001 indicated VAT floor tile in two locations. All asbestos was removed in 2002 modernization.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	1961	0	MAR-09

F2020.04 Mould - *

No concerns noted or reported

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1961	0	MAR-09

F2020.09 Other Hazardous Materials - *

Cleaning agents, science room chemicals.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1961	0	MAR-09

S8 FUNCTIONAL ASSESSMENT

K3010 Building Services -

Overall the facility services are good condition No computer room air conditioning unit. Computer room overheating.

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

Event: ProvideComputer Room Air Conditioning Units

Concern:

The computer room currently has no air conditioning and is constantly in a state of overheating. No zone temperature control is available in the space. Portable fans and exhaust fans are constantly running to remove computer generated heat and result in poor air quality and an uncomfortable, unhealthy and potentially dangerous work/study environment. **Recommendation:**

Install a packaged DX computer room air conditioning unit with a rooftop condensing unit with zone temperature control.

Туре	Year	Cost	Priority
Operating Efficiency Upgrade	2009	\$24,000	High

Updated: MAR-09

K3020 Indoor Environment -

Rating	Installed	Design Life	Updated
5 - Good	1961	0	MAR-09

K4010.01 Barrier Free Route: Parking to Entrance - *

Curb cuts installed, handicap stall provided, but not marked, needs sign.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	0	MAR-09

K4010.02 Barrier Free Entrances - *

Push button power assists on entry doors

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	2002	0	MAR-09

Event: Repair Barrier Free Entrances

Concern: Power assists not currently working **Recommendation:** Service and repair door.

Туре	Year	Cost	Priority
Repair	2009	\$3,500	Low

Updated: MAR-09

K4010.03 Barrier Free Interior Circulation - *

No restrictions to access

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	0	MAR-09

K4010.04 Barrier Free Washrooms - *

Washrooms provided

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	0	MAR-09

K4020 Building Code -

No concerns noted or reported

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	0	MAR-09