RECAPP Facility Evaluation Report

Calgary RCSSD #1



St. Raymond School B2137A Calgary

Report run on: March 5, 2009 11:13 AM

Calgary - St. Raymond School (B2137A)

Facility Details		Evaluation Details		
-	St. Raymond School	Evaluation Company:	Marshall Tittamore Architects	
	4416 - 16 Street S. W.	Evaluation Date:	October 10 2006	
Location: Calgary	Evaluator Name:	Tom Tittamore		
Building Id:	B2137A			

Total Maintenance Events Next 5 years:\$1,479,6575 year Facility Condition Index (FCI):43.62%

General Summary:

 Gross Area (sq. m):
 1,482.20

 Replacement Cost:
 \$3,391,935

 Construction Year:
 1953

St. Raymond School is a 2383 m2, 350 capacity K-9 facility located in the Altadore community of south west Calgary. It is a one-storey facility built in two phases: the original 1953 section and a subsequent addition in 1957. For the purpose of this report the school is considered as one facility since all building components of the addition are virtually identical to the original section.

A portable classroom unit was added to the east end of the school in the mid 1980's and houses fitness facilities exclusively. This facility component is described in this section of our report.

The school has been leased to the Rundle College Society for their K-9 program. A new high school Rundle College facility is currently under construction immediately to the north of this school.

There are a number of building elements that rate as 1, 2 or 3 and have significant concerns regarding safety and operational / maintenance matters.

The school is in poor to acceptable condition.

Structural Summary:

The major construction materials include: cast in place concrete foundations and slab on grade; wood framed floor construction to the 1957 addition; a cast in place concrete (walls, floor, ceiling) basement service area; load bearing wood stud and concrete block masonry partitions; wood framed T&G roof structure with wood glulam beams.

The school structure is in acceptable condition. Of principal concern is the gymnasium concrete floor slab that has shifted over time and has created a noticeable 'valley' on the north end of the instruction space. Other less serious structural remedial work is also required.

Envelope Summary:

Exterior finishes include: brick masonry and stucco, SBS roofing, painted wood soffits, single and double glazed wood windows, painted wood and metal doors in wood frames.

The school envelope is in poor condition. This report recommends replacement of all original wood windows and stucco finishes.

Interior Summary:

Major interior materials include: original VAT and battleship linoleum, plus resilient flooring to corridors, classrooms and the gymnasium; carpet to the administration; wood flooring to the stage area; glu-on acoustic ceiling panels (original); painted gypsum board and plaster walls and ceilings; brick veneer to gym walls; quarry tile floors and ceramic tile walls to the washrooms; painted metal and wood doors and frames.

The school interior is in poor condition. There a a number of building deficiencies that rate either 1, 2 or 3 and have significant safety and operational / maintenance concerns specifically regarding the condition of the original VAT / battleship lino, glu-on ceiling tiles, and washroom finishes / accessories. Lack of storage has also compromised circulation within classrooms and corridors.

Mechanical Summary:

Two gas fired steam boilers (replaced 2005) deliver heat through the piping system (replaced 2003) to the original space heaters and to an air handling unit serving the gym only. Classrooms are served by unit ventilators. All ventilation equipment is original and does require replacement. Plumbing fixtures and sanitary drainage is original to

the school and fixtures require replacement.

Overall the mechanical systems are in marginal to acceptable condition.

Electrical Summary:

The majority of electrical systems and components are original to the facility and significant upgrading and replacement is required.

Overall the electrical systems are in poor to marginal condition.

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

S1 STRUCTURAL

A1010 Standard Foundations*

Cast in place concrete pilaster piers

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	0	100	MAR-09

Event: Repair damaged concrete piers

Concern:

Concrete piers (2) supporting brick pilasters have been damaged through impact. **Recommendation:**

Repair damaged concrete piers.

Туре	Year	Cost	Priority
Repair	2009	\$2,460	Low

Updated: MAR-09

A1030 Slab on Grade*

Cast in place concrete slab on grade

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	0	100	MAR-09

Event: Repair damaged concrete floor areas

Concern: Pitted concrete floor in basement service room and damaged concrete floors in service tunnel **Recommendation:** Repair damaged concrete floor areas

Type Repair

<u>Year</u> <u>Cost</u> 2009 \$9,840 Priority Low

A1030 Slab on Grade*

Gymnasium concrete floor slab is not level

Rating	Installed	<u>Design Life</u>	Updated
2 - Poor	0	100	MAR-09

Event: Repair gym floor

Concern:

The northerly section of the gymnasium floor has shifted and has created a 'valley' at this end **Recommendation:**

Repair shifted section of gym floor

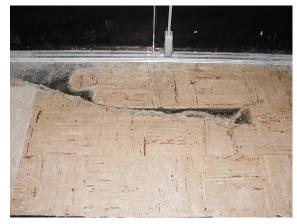
Type
Failure Replacement

<u>Year</u> <u>Cost</u> 2009 \$73,800

Priority

High

Updated: MAR-09



Failed VAT flooring at emergency exit, due in part to shifted gym floor slab.

A2020 Basement Walls (& Crawl Space)*

Cast in place concrete and concrete masonry basement walls to service room and service tunnels

Rating	Installed	Design Life	<u>Updated</u>
3 - Marginal	0	100	MAR-09

Event: Repair damaged concrete wall

Concern: Crack in basement service room concrete wall adjacent to electrical equipment **Recommendation:** Repair damaged concrete wall

Туре	Year	Cost	Priority
Repair	2009	\$2,460	High

Updated: MAR-09

B1010.01 Floor Structural Frame (Building Frame) 1957 Section

Wood framed floor to 1957 section supported on perimeter concrete foundation wall and interior piers.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	100	MAR-09

B1010.01 Floor Structural Frame (Building Frame) 1953 Section

Cast in place concrete walls and concrete columns in basement service room supporting concrete floor above

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	100	MAR-09

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

Load bearing wood studs and concrete block masonry

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-07

B1010.03 Floor Decks, Slabs, and Toppings*

Cast in place concrete floor above basement service room

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-07

B1010.09 Floor Construction Fireproofing*

Fire rated concrete floor above basement service room

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	MAR-07

B1010.10 Floor Construction Firestopping*

Batt type firestopping

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	0	50	MAR-07

B1020.01 Roof Structural Frame*

Wood T&G roofing supported on glulam wood beams supported by load bearing wood studs and concrete block masonry.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-09

B1020.06 Roof Construction Fireproofing*

Fire rated wood roof assembly and fire rated gypsum board

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-07

S2 ENVELOPE

B2010.01.02.01 Brick	Masonry: Fxt W	all Skin*			
Brick masonry on pilast					
Rating 4 - Acceptable		Design Life 75	Updated MAR-07		
B2010.01.08 Cement F	Plaster (Stucco):	Ext. Wall*			
Stucco finish to exterior	walls				
<u>Rating</u> 3 - Marginal	Installed 0	Design Life 75	Updated MAR-09		
Concern: Sections of c stucco sectio evident in the need for new v Recommenda	ns. Evidence exposed original windows.	– ave been co of cracking	overed by newer nonetheless are ent related to the		
Type Repair Updated: MA	2012	nr <u>Cost</u> 2 \$369,000	<u>Priority</u> Low		
B2010.01.09 Expansio	n Control: Exter	rior Wall Skir	<u>)*</u>		
Sufficient integration of	various exterior I	ouilding mater	rials and planes		
Rating 4 - Acceptable	Installed 0	Design Life 75	<u>Updated</u> MAR-07		
B2010.01.11 Joint Sea	lers (caulking):	Ext. Wall**			
Rating 4 - Acceptable	Installed 1991	Design Life 20	Updated MAR-07		
B2010.01.13 Paints (&	Stains): Exterio	or Wall**			
Painted wood windows,	, stucco				
Rating 4 - Acceptable	Installed 1991	Design Life 15	Updated MAR-07		

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

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-07

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

Any upgrades assumed within costing for stucco upgrades, B2010.01.08 above

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-07

B2010.06 Exterior Louvers, Grilles, and Screens*

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	MAR-07

B2010.09 Exterior Soffits*

Painted wood soffits

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	50	MAR-07

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

Painted wood windows - original, single and double glazed

<u>Rating</u>	Installed	Design Life	Updated
2 - Poor	1957	35	MAR-09

Event: Replace all original wood windows

Concern: Original wood windows are failing re operation and integration with exterior envelope **Recommendation:** Replace all original wood windows

Type Failure Replacement Year Cost 2010 \$369,000 <u>Priority</u> High

D0000 04 04	A Lorenza francesco de Electro de La	O1 ++
B2030.01.01	Aluminum-Framed	Storetronts
	/	

Sliding aluminum door from administration to exterior

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1991	30	MAR-07

B2030.01.10 Wood Entrance Door**

Newer steel entry door in original wood frames

Rating	Installed	Design Life	Updated
4 - Acceptable	1957	30	MAR-07

B2030.05 Other Exterior Doors*

Painted wood and metal exit doors

Rating	Installed	Design Life	Updated
4 - Acceptable	1957	0	MAR-07

B3010.01 Deck Vapor Retarder and Insulation*

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	25	MAR-09

B3010.04.05 Membrane Roofing (Single Ply, EPDM, PVC, TPO)**

Rating	Installed	Design Life	Updated
5 - Good	2001	25	MAR-07

B3010.08.02 Metal Gutters and Downspouts**

Prefinished metal downspouts

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1991	30	MAR-09

Event: Provide downspout extensions and splashpads

Concern:

The roof seems to drain well to downspouts, however there is poor drainage from the bottom of the downspouts to grade **Recommendation:**

Provide suitable downspout extensions and / or spashpads at the base of all downspouts

Consequences of Deferral:

Continued deterioration to building foundation systems; continued ponding at grade

Туре	<u>Year</u>	<u>Cost</u>	Priority
Preventative Maintenance	2010	\$9,840	Medium

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S3 INTERIOR						
C1010.01 Interior Fix	ed Partitions*					
Wood stud partitions v	with gypsum board	ł				
Rating 4 - Acceptable	Installed 0	Design Life 0	Updated MAR-09			
C1010.05 Interior Wir	ndows*					
Wood framed interior t	transom windows					
Rating 4 - Acceptable	Installed 0	Design Life 80	Updated MAR-07			
C1010.05 Interior Wir	ndows*					
Glass block units in gy	/mnasium					
Rating 4 - Acceptable	Installed 0	Design Life 80	Updated MAR-07			
C1010.07 Interior Par	rtition Firestoppi	<u>ng*</u>				
Numerous service per	netrations through	partitions				
Rating 2 - Poor	Installed 1957	Design Life 50	Updated MAR-09			
	er firestopping to	partitions				
Has likely co partition fires Recommenc		ntegrity of the	school's interior			
<u>Type</u> Code Repair	<u>Yea</u> 200		<u>Priority</u> Medium			
Updated: M						

C1020.01 Interior Swinging Doors*

Painted wood doors in wood frames. Mixture of door hardware.

<u>Rating</u>	Installed	Design Life	Updated
3 - Marginal	1957	40	MAR-09

Event: Install proper door hardware

Concern: Interior doors have a variety of door hardware, some quasiresidential **Recommendation:** Install proper door hardware as required

Туре	Year	Cost	<u>Priority</u>
Preventative Maintenance	2010	\$3,075	Low

Updated: MAR-09

C1020.03 Interior Fire Doors*

Painted metal door to basement service area

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	50	MAR-07

C1020.07 Other Interior Doors*

Wood chair storage doors in gymnasium

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

Event: Replace chair storage doors

Concern:

Wood doors under stage for chair storage in poor condition **Recommendation:** Replace chair storage doors

Туре	Year	Cost	<u>Priority</u>
Failure Replacement	2012	\$9,146	Medium

Updated: MAR-09

C1030.01 Visu	al Display	Boards**
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Whiteboards, tackboards, chalkboards

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	20	MAR-07

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

Original painted metal toilet partitions

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1957	30	MAR-09

Event: Replace all original toilet partitions

Concern:

Old painted metal toilet partitions barely functioning and in poor appearance **Recommendation:** Replace all toilet partitions with pre-finished type

Туре	Year	Cost	Priority
Failure Replacement	2010	\$11,070	Low

Updated: MAR-09

C1030.06 Handrails*

Painted metal handrail to basement service room

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	1957	40	MAR-09

Event: Replace damaged handrail

Concern: Loose handrail to basement service area Recommendation: Replace damaged handrail Consequences of Deferral: Potential safety concerns for building maintenance staff

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2008	\$1,476	Medium

Updated: MAR-09

C1030.08 Interior Identifying Devices*

Nominal interior room signage

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	MAR-07

C1030.10 Lockers**

Painted shoe storage rack in corridor

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1957	30	MAR-07

C1030.12 Storage Shelving*

Wood and metal storage shelving

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-07

<u>C1030.1</u>	4 Toilet, Bath, and	Laundry A	ccessories*		
Toilet pa	per, paper towel, n	apkin dispei	nsers, mirrors		
Rating 3 - Margin	nal	Installed 1957	Design Life 20	Updated MAR-09	
Event:	Upgrade washroo	om accesso	ories		
	Concern: Washrooms combi Recommendation	:	-		
	Upgrade all was upgrades. See als			other linisnes	
	<u>Type</u> Operating Efficiency		ar <u>Cost</u> 2 \$7,380	<u>Priority</u> Low	
	Updated: MAR-09				
<u>C2010 S</u>	tair Construction*				
Cast in p	lace concrete stair	to basemer	t service area	and main corridor	
Rating 4 - Accep	table	Installed 0	Design Life 100	Updated MAR-07	
<u>C2020.0</u>	5 Resilient Stair F	inishes**			
Rubber f	looring to main cor	idor stair			
Rating 4 - Accep	table	Installed 1957	Design Life 20	Updated MAR-07	
<u>C2020.0</u>	8 Stair Railings an	d Balustra	des*		
Painted	wood railing to mair	n corridor st	air		
<u>Rating</u> 4 - Accep	table	Installed 0	Design Life 40	Updated MAR-07	

C2020.11 Other Stair Finishes*

Painted concrete stair to basement

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

C3010.01 Concrete Wall Finishes*

Painted concrete walls in basement service area

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-07

C3010.02 Wall Paneling**

Painted plywood wainscotting in corrido

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	MAR-07

C3010.03 Plaster Wall Finishes*

Plaster walls to some interior partitions

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1957	60	MAR-07

C3010.04 Gypsum Board Wall Finishes*

Gypsum board to some interior partitions

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	60	MAR-07

C3010.06 Tile Wall Finishes**

Ceramic tile to washrooms

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1957	40	MAR-09

Event: Replace washroom ceramic tile wall finishes

Concern:

Original ceramic tile has ongoing maintenance problems. **Recommendation:** Replace all ceramic tile on washroom walls. See also Section C1030.02

Туре	Year	Cost	Priority
Failure Replacement	2012	\$18,450	Low

Updated: MAR-09

C3010.11 Interior Wall Painting*

Painting to interior wall surfaces

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1991	15	MAR-09

Event: Repaint interior walls and ceilings

Concern:

Sections of the school require painting to wall and ceiling areas

Recommendation:

Repaint sections of the school's interior walls and ceilings as required

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2012	\$36,900	Low

Updated: MAR-09

C3010.14 Other Wall Finishes*

Brick veneer to lower gymnasium wall area

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1957	0	MAR-07

C3020.02 Tile Floor Finishes**

Quarry tile flooring in washrooms

Rating	Installed	Design Life	Updated
3 - Marginal	1957	50	MAR-09

Event: Replace washroom quarry tile flooring

Concern:

Original quarry tile flooring in washrooms has ongoing maintenance problems.

Recommendation:

Replace all quarry tile flooring in washrooms. See also Section C1030.02

Туре	Year	Cost	Priority
Failure Replacement	2012	\$21,107	Low

Updated: MAR-09

C3020.04 Wood Flooring**

Wood stage floor

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-07

C3020.07 Resilient Flooring**

Various sections of resilient sheet, battleship linoleum and tile flooring in classrooms, corridors and gymnasium

Rating	Installed	Design Life	Updated
2 - Poor	1957	20	MAR-09

Event: Replace failed sections of resilient flooring

Concern:

Sections of resilient flooring in classrooms and the gymnasium have failed. Poor remedial work with patch / repair. The resilient flooring in the gym is not suited for the intended use.

Recommendation:

Replace failed sections of resilient flooring in some classrooms; replace gymnasium floor with pulastic floor system.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2010	\$98,400	High

C3020.08 Carpet Flooring**

Carpet flooring in administration

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1991	15	MAR-07

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

Original glu-on acoustic tile celing panels

Rating	Installed	Design Life	Updated
3 - Marginal	1957	25	MAR-09

Event: Install suspended acoustic tile ceiling in corridors

Concern:

Sections of original glu-on acoustic ceiling tiles have failed. Ad hoc installation of electrical / communications conduit clutters main corridor areas.

Recommendation:

Install suspended acoustic tile ceiling system in corridors. Clearance in some areas may be a challenge.

Туре	Year	Cost	Priority
Failure Replacement	2012	\$73,800	Medium

Updated: MAR-09

C3030.07 Interior Ceiling Painting*

Painted finishes to ceilings

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1991	20	MAR-09

Event: Repaint sections of ceiling

Concern: Sections of ceilings require repainting **Recommendation:** Repaint required sections of ceilings

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2012	\$24,600	Low

S4 MECHANICAL

D2010.01 Water Closets

Ceramic floor mounted fixtures.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	1953	35	MAR-09

Event: Replace existing water closets

Concern:

Fixtures are original and flush valves leak **Recommendation:** Replace fixtures and related trim. Basis of replacement cost \$1500/fixture - cost does not include replacement cost of existing sanitary drains/vents.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2009	\$18,450	Medium

Updated: MAR-09

D2010.02 Urinals

Original floor mounted recessed urinal with flush tank.

Rating	Installed	<u>Design Life</u>	Updated
2 - Poor	1953	35	MAR-09

Event: Replace urinals

Concern:

Original recessed fixtures exceed theoretical design life and concern with hygiene. **Recommendation:**

Replace with new flush valve wall hung urinals.

Туре	Year	Cost	Priority
Failure Replacement	2012	\$7,380	Medium

D2010.03 Lavatories

Rating	Installed	Design Life	<u>Updated</u>
2 - Poor	1953	35	MAR-09

Event: Replace lavatory fixtures and trim

Recommendation:

Replace existing fixtures and trim. Basis of cost replacement \$1000 per fixture. Cost includes reconnection to existing services, does not include replacement costs of sanitary/vent mains.

Consequences of Deferral:

Wasted water with leaks additional repair costs.

Туре	<u>Year</u>	Cost	<u>Priority</u>
Failure Replacement	2009	\$12,300	Medium

Updated: MAR-09

D2010.04 Sinks**

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event: Replace original sinks and trim

Concern: Existing sink/trim is past life cycle. **Recommendation:** Replace with new sinks and trim.

Туре	Year	Cost	Priority
Failure Replacement	2008	\$5,628	Medium

D2010.08 Drinking Fountains / Coolers**

Original vitreous china drinking fountains. Fountains do not conform with current barrier free standards.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	1953	35	MAR-09

Event: Replace existing drinking fountain

Concern:

Existing drinking fountains have spalls and finish wear. They always look dirty even when recently cleaned. **Recommendation:**

Replace fixtures with barrier free fixtures.

Туре	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2012	\$3,075	Medium

Updated: MAR-09

D2010.09 Other Plumbing Fixtures*

Service Sinks for janitors vacuum breakers not installed in all.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1953	0	MAR-09

D2020.01.01 Pipes and Tubes: Domestic Water*

Existing domestic water piping replaced in 2002 with new copper piping.

<u>Rating</u>	Installed	Design Life	Updated
5 - Good	2003	40	MAR-07

D2020.01.02 Valves: Domestic Water**

Most domestic water valves were replaced in 2002.

Rating	Installed	Design Life	Updated
5 - Good	2003	40	MAR-07

D2020.01.03 Piping Specialties (Backflow Preventors)**

Backflow preventors have been installed in water mains and heating system. Minor problems with backflow devices at sink locations.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2000	20	MAR-07

D2020.01.08 Hose Bibbs*

Hose bibbs are original

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	0	MAR-07

D2020.02.06 Domestic Water Heaters**

Gas fired domestic water heater located in mechanical room.

Rating	Installed	Design Life	Updated
5 - Good	2003	20	MAR-07
	Capacity S	Size <u>Capac</u>	ity Unit
	113	li	tre

D2020.03.01 Piping Insulation: Domestic Water

Piping insulation has been installed in the last 3 years, however pipe type identification and flow direction was not done.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	0	MAR-07

D2030.01 Waste and Vent Piping*

Waste and vent piping is original to the school and has been numerous repairs where leaks have occurred. Original piping cast iron with repairs done in plastic.

<u>Rating</u>	Installed	Design Life	Updated
3 - Marginal	1953	50	MAR-09

Event: Replace sanitary mains and vent piping

Concern: Original piping with numerous patching done throughout the years. **Recommendation:** Replace all main sanitary piping up to fixtures.

Туре Year Cost Priority Medium Failure Replacement 2012 \$24,600

D2030.02 Waste Piping Specialties

Original floor drains are damaged.

Rating	Installed	Design Life	Updated
3 - Marginal	1953	0	MAR-09

Event: Damaged floor drains

Concern: Floor drains damaged in washrooms. **Recommendation:** Replace drain body and grate of damaged drains.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2009	\$1,689	Medium

Updated: MAR-09

D2030.03 Waste Piping Equipment*

Drains in basement mechanical room connect to sump. Submersible pump with float control appears to be original. Pump appears to be in proper working order, however has exceeded life expectancy.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1953	30	MAR-09

D2040.01 Rain Water Drainage Piping Systems*

Storm drains are original steel piping discharging to gutter system.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1953	50	MAR-07

D2040.02.04 Roof Drains*

Roof drains are conventional style drains.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	40	MAR-09

D3010.02.01 Natural Gas Supply Systems

Gas piping is steel piping and has been modified to suit boiler installation.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1953	0	MAR-07

D3010.02.01.01 Metering & Regulating Equip:Nat.Gas

Indoor gas meter with original service piping is located in basement mechanical room,

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

D3010.02.01.04 Distribution Piping: Natural Gas

Modifications to gas piping have been done at time of steam boiler and heating changes (2003)

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1953	0	MAR-07

D3020.01.01 Heating Boilers & Accessories: Steam**

Two new gas fired steam boilers were installed in 2005 to serve heating elements and coil in gym air handling unit.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2005	35	MAR-09

D3020.01.03 Chimneys (&Comb. Air) : Steam Boilers**

Chimney modified to suit new steam boiler

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	35	MAR-07

D3020.01.04 Water Treatment: Steam Boilers*

Treatment upgraded with boilers in 2005.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2005	35	MAR-09

D3040.01.01 Air Handling Units: Air Distribution**

Air handling unit serves gymnasium only. Gym air system is constant volume system with steam coil, filters, fan and pneumatic controls.

Rating	Installed	Design Life	Updated
3 - Marginal	1953	30	MAR-09

Event: Replace ventilation system

Concern:

No air supply to classrooms, corridor, offices. Replace air system serving gymnasium.

Recommendation:

Air system required for corridor, offices and classroom ventilation. New air system also required to replace existing gym unit.

Туре	Year	Cost	Priority
Failure Replacement	2009	\$67,650	High

Updated: MAR-09

D3040.01.04 Ducts: Air Distribution*

All ducts are original galvanized sheet metal.

<u>Rating</u>	Installed	Design Life	Updated
2 - Poor	1953	50	MAR-09

Event: Add distribution ducts.

Concern: Ducts need to be added to serve new air system **Recommendation:** Add distribution ducts in corridor and classrooms

Туре	Year	Cost	Priority
Failure Replacement	2009	\$55,350	Medium

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Air outlets do not exist in classrooms and corridor

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event: Add air outlets

Concern: Air outlets do not exist Recommendation: Add air outlets

Туре	Year	Cost	Priority
Indoor Air Quality Upgrade	2009	\$12,300	Medium

Updated: MAR-09

D3040.02 Steam Distribution Systems: Piping/Pumps**

Heaters installed are original to building (1953). Piping replaced 2003.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2003	30	MAR-09

D3040.04.01 Fans: Exhaust

Exhaust fans are original and some are not operating properly

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event: Replace exhaust fans

Concern: Old fans not working properly **Recommendation:** Replace exhaust fans

Туре	Year	Cost	Priority
Failure Replacement	2009	\$17,220	Medium

D3040.04.03 Ducts: Exhaust*

Kitchen exhaust duct not in accordance with NFPa 96. Duct is galvanized (not in fire rated enclosure) and crosses into storage room before exiting. If range is used for commercial purposes, hood/fan/duct to be changed to be in accordance with NFPa.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	50	MAR-09

Event: Replace existing ducts

Concern: Duct sizes too small and require modification **Recommendation:** Increase duct sizes and change kitchen duct

<u>Type</u>	Year	<u>Cost</u>	Priority
Failure Replacement	2009	\$14,760	Medium

Updated: MAR-09

D3040.04.05 Air Outlets and Inlets

Air outlets original steel

Rating	Installed	Design Life	Updated
3 - Marginal	1953	30	MAR-09

Event: Replace air outl/inlets

Concern: Existing grilles painted over, insufficient grilles **Recommendation:** Change to new grilles

Туре	Year	Cost	Priority
Failure Replacement	2009	\$7,380	Medium

Updated: MAR-09

D3050.05.01 Convectors**

Convectors modified in 2005 upgrade

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1953	40	MAR-07

D3050.05.07 Unit Ventilators**

Classroom unit ventilators are original to school. Indoor air quality does not conform to current standards.

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event: Replace ventilators.

Concern:

Units exceed life cycle and poor air quality **Recommendation:** Units should be removed and replaced with new air handling units **Consequences of Deferral:** Poor air quality and heating

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2010	\$18,450	Medium

Updated: MAR-09

D3060.02.03 Pneumatic and Electric Controls*

Controls for classroom ventilators not properly responding. Limited pneumatic controls for zone control.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	0	MAR-09

Event: Replace room temperature control

Concern: Poor temperature control **Recommendation:** Change existing room controls

Туре	<u>Year</u>	Cost	Priority
Failure Replacement	2010	\$17,220	Medium

Updated: MAR-09

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Fire extinguishers mounted with wall brackets, extinguishers should be in cabinets in all public spaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	MAR-07

S5 ELECTRICAL

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

The Main Service Distribution corroded and is obsolete. Data is difficult to obtain. There is no surge protection in this panel.

Rating	Installed	Design Life	Updated
2 - Poor	1953	40	MAR-09

Event: replace main service panel

Concern:

Maintenance problems trying to find replacement parts and the possibility of a failure of some part or all of the panelboard. **Recommendation:**

Replace panelboard with new type.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2012	\$30,750	Medium

Updated: MAR-09

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

Panels in 1953 section are original with some replaced in the north wing.

Rating	Installed	Design Life	Updated
3 - Marginal	1953	30	MAR-09

Event: Replace panels in original school and gym.

Concern:

Possible failure of equipment with replacement parts difficult to obtain. **Recommendation:**

Revise panels to new type similiiar to the kitchen area.

Туре	Year	Cost	Priority
Failure Replacement	2009	\$6,150	Medium

D5010.07.02 Motor Starters and Accessories**

Switches and starters which were part of the boiler were replaced during the 2005 replacement of the boiler.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1953	30	MAR-09

Event:	Replace starters not replaced during the boiler replacement
	Concern: Older equipment could fail at any time. No longer making direct replacements. Recommendation: Revise to new style starters.

<u>Type</u>	Year	Cost	<u>Priority</u>
Failure Replacement	2012	\$6,150	Medium

Updated: MAR-09

D5020.01 Electrical Branch Wiring*

Wiring for additions and upgrades is mainly run in conduit mounted on the surface of the walls.

Rating	Installed	Design Life	<u>Updated</u>
3 - Marginal	1953	50	MAR-09

Event: open wiring in hallways to be organized and put into conduit

Concern:

Wiring in hallways is on the surface and could present a safety and security problem. **Recommendation:**

Organize the wiring into surface or concealed conduits.

Туре	Year	Cost	Priority
Preventative Maintenance	2009	\$12,300	Low

D5020.02.01 Lighting Accessories (Lighting Controls)*

Original Light switches throughout.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	1953	30	MAR-09

Event: Replace light switches.

Concern: Older light switches will fail. **Recommendation:** Replace all older light switches throughout the school.

Туре	Year	Cost	Priority
Failure Replacement	2009	\$1,845	Medium

Updated: MAR-09

D5020.02.02.02 Interior Florescent Fixtures**

Mainly T-12 lamps.

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event: upgrade lights to electronic ballasts with T-8 lamps

Concern: Maintenance costs and lower light output. **Recommendation:** Revise light fixtures to new style T-8 lamp and electronic ballast.

Туре	Year	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2009	\$30,750	Low

Updated: MAR-09

D5020.02.03.02 Emergency Lighting Battery Packs**

Newer battery packs installed and emergency heads.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	20	MAR-09

D5020.02.03.0	3 Exit Signs*
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Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event: replace exit lights.

Concern:

Older incandescent exit lights draw more power to operate and have a higher maintenance need. **Recommendation:** Replace exit lights.

Туре	<u>Year</u>	Cost	Priority
Energy Efficiency Upgrade	2009	\$3,690	Low

Updated: MAR-09

D5020.03.01.01 Exterior Incandescent Fixtures*

Older style spot lights on roof and front entrance.

Rating	Installed	<u>Design Life</u>	Updated
3 - Marginal	1953	30	MAR-09

Event:	remove old fixtures and	install more efficient H	lID
	type		
	Concern:		
	Older lights are in poor re longer.	pair and may not fund	ction much
	Recommendation:		
	Remove existing incander lighting in these areas.	scent lights and add	new HID
	Туре	<u>Year Cost</u>	<u>Priority</u>
	Energy Efficiency Upgrade	2009 \$2,460	Low
	Updated: MAR-09		
<u>D5020.0</u>	03.01.03 Exterior Metal Halio	de Fixtures*	
Lighting	is older but is adequate.		

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	30	MAR-07

D5030.01 Detection and Fire Alarm**

Fire Alarm Panel Installed in 1997 Simplex 4100 3 Zones. Not all rooms have smoke or heat detector protection.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1997	25	MAR-09

 Event:
 Install additional fire detection devices and pull

 stations
 Concern:

 There is a lack of proper fire detection devices in the building.

 Recommendation:

 Add proper detection devices where required.

Туре	<u>Year</u>	Cost	Priority
Code Upgrade	2009	\$4,305	Low

Updated: MAR-09

D5030.02.02 Intrusion Detection**

Security System with motion sensors at the front entrance and in the corridors. Some exit doors do not have door contacts and/ or motion sensors near.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	0	25	MAR-07

D5030.02.03 Security Access**

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	MAR-07

D5030.03 Clock and Program Systems*

Simplex Time Clock with 3 circuits.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	25	MAR-07

D5030.04.01 Telephone Systems*

Telephones have been updated to analog from rotary.

Rating	Installed	Design Life	Updated
4 - Acceptable	1953	25	MAR-07

D5030.04.04 Data Systems*

Newer system installed by the tenant in the school with wireless LAN system in one wing and surface Cat. 5 wiring to other locations.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	25	MAR-07

D5030.05 Public Address and Music Systems**

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	MAR-07

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Nominal gymnasium equipment

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	15	MAR-07

E2010.02 Fixed Casework**

Casework to classroom perimeter; shelving; painted plywood, plastic laminate. Painted plywood shoe racks and coat hooks.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1957	35	MAR-07

E2010.03.01 Blinds**

Venetian blinds to exterior windows

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
5 - Good	1991	30	MAR-07

E2010.03.06 Curtains and Drapes**

Curtains in stage area

Rating	Installed	Design Life	Updated
4 - Acceptable	1991	30	MAR-09

E2020 Moveable Furnishings

Standard classroom and administration area furniture

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	MAR-07

F1010.02.04 Portable and Mobile Buildings*

A portable building that is used as a single-purpose weight room was added onto the school in the 1980's. It is a woodframed building supported on wood foundations. Interior finishes include resilent sheet flooring, painted gypsum board / plywood walls and spraytex ceilings. Exterior finishes included painted wood siding / skirting and an SBS roof. There are no windows. The building has painted metal doors and frames. The gym equipment is in good condition.

Mechanical:

Heating is minimal within space (electric entrance heater only). Portable does not have proper ventilation in accordance with indoor quality standards.

Electrical

This portable has surface fluorescent lights which give an adequate light level to the room. The security this room is inadequate as there are no contacts on one exterior door and no motion detector as in other access areas of the school. The life safety systems are not adequate as there is no pull station near the east exit doors. The power/computer outlets are adequate for the intended use of the room.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	MAR-09

F2020.01 Asbestos*

VAT and battleship lino flooring in gym and classrooms

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

S8 FUNCTIONAL ASSESSMENT

K2010 Building Circulation

Lack of storage in the facility

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

K4010.01 Barrier Free Route: Parking to Entrance*

Barrier free access to main entrance from shared north parking lot

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	MAR-07

K4010.02 Barrier Free Entrances*

No barrier free entrance

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

Event: Provided barrier free entry hardware

Concern: There isn't a barrier free entrance **Recommendation:** Provide barrier free entry hardware to main entry

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2010	\$2,460	Medium

Updated: MAR-09

K4010.03 Barrier Free Interior Circulation*

Barrier free access between upper south wing and lower north wing does not exist

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

Event: Provide barrier free lift

Concern: Barrier free access between southern upper wing and lower northern wing doesn't exist. **Recommendation:** Provide barrier free lift between wings at the stair location

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2010	\$9,840	Medium

K4010.04 Barrier Free Washrooms*

There isn't a barrier free washroom

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

Event: Provide barrier free washroom

Concern: There isn't a barrier free washroom **Recommendation:** Provide a barrier free washroom

Туре	Year	Cost	Priority
Barrier Free Access Upgrade	2010	\$12,300	Medium