

RECAPP Facility Evaluation Report

Calgary School District #19



Andrew Sibbald Elementary School

B9378A

Calgary

Facility Details	
Building Name:	Andrew Sibbald Elementary
Address:	1711 Lake Bonavista Drive S
Location:	Calgary
Building Id:	B9378A
Gross Area (sq. m):	3,524.00
Replacement Cost:	\$8,064,484
Construction Year:	1971

Evaluation Details	
Evaluation Company:	Neil Jaud Architect inc.
Evaluation Date:	July 22 2008
Evaluator Name:	Neil Jaud

Total Maintenance Events Next 5 years: \$2,409,000
5 year Facility Condition Index (FCI): 29.87%

General Summary:

Single storey 3542m2 17 Classroom school plus Library, Band room Stage, Gym and General Offices built in 1971. Brick masonry veneer exterior finish and flat SBS roof. The school is in good condition.

Structural Summary:

Wood columns supporting glulam beams and metal deck. Concrete foundations. The structure is in good condition.

Envelope Summary:

Brick veneer Painted metal and wood doors, Pre-finished metal flashings, Aluminum windows. Re-caulking of openings required. The envelope is in generally good condition.

Interior Summary:

VAT and Carpet flooring with re-finished wood flooring in gym. Stage wood flooring requires refinishing. Repainted in 2004. The interiors are in good condition.

Mechanical Summary:

The schools heating is generated with two Bryan Boilers. These supply hot water to heating coils in an Air Handling Unit located in the boiler room, ceiling and wall mounted entrance fan coils and baseboard radiation on perimeter walls. Cooling is provided by cooling coils in a diifferent Air Handling Unit; this unit also has a wet media spray humidifier. Control for the heating and cooling in the school is Pneumatic.

Domestic hot water is produced and supplied from a 40 gallon John Wood hot water tank and supplied through the school in copper piping by a TACO circulation pump.

Sanitary sewer, storm sewer, domestic water and natural gas are supplied by underground municipal services.

The school has a generally good mechanical system that is reaching the end of its life cycle and is recommended for upgrading. Attention to the poor air conditioning in the computer and server room by the library is recommended. Some ceiling tiles have been removed allowing for extra air to be returned to the detriment of the return air for the surrounding rooms.

The schools stage is sprinklered.

Electrical Summary:

The main distribution is 800A 120/208V 3 phase. The phone and data systems have been upgraded in the last 10 years. The fire alarm system should be updated. Overall the electrical system is in good 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*

Concrete strip footings and frost walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

A1030 Slab on Grade*

Cast in place concrete slab on grade for main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

B1010.01 Floor Structural Frame (Building Frame)*

Glulam beams on wood columns and masonry pilasters supporting roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

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

Concrete masonry bearing walls and pilasters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

B1020.01 Roof Structural Frame*

Metal roof deck on glulam beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

B1020.06 Roof Construction Fireproofing*

Sprayed fireproofing to roof deck and supporting structure in Mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Brick masonry veneer over vented air space and insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	75	MAR-09

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

Stucco fascias at entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	75	MAR-09

B2010.01.09 Expansion Control: Exterior Wall Skin*

Control joints at intervals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

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

Caulking at door and window openings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1971	20	MAR-09

Event: Replace caulking

Concern:

Caulking cracked and separating from adjoining finishes.

Recommendation:

Replace caulking.

Consequences of Deferral:

Excessive maintenance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$4,500	Medium

Updated: MAR-09

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

Concrete masonry backup walls for brick veneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

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

Vapor retarder applied to exterior surface of concrete masonry backup wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

B2010.06 Exterior Louvers, Grilles, and Screens*

Prefinished metal louvres.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

B2010.09 Exterior Soffits*

Stucco soffits at entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

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

Clear anodized window frames with twin glass windows. Some windows with Glasweld panels below windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

Event: Replace 22 Windows

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$74,700	Unassigned

Updated: MAR-09

B2030.01.02 Steel-Framed Storefronts: Doors**

Painted hollow metal doors in pressed steel frames. Entry hardware, panic bars, kickplates, closers and weatherstrip.

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

Event: Replace Doors and Frames - 5 pair

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$37,700	Unassigned

Updated: MAR-09

B2030.02 Exterior Utility Doors**

Hollow metal doors in pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

Event: Replace 2 Exterior Utility Doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$5,500	Unassigned

Updated: MAR-09

B3010.01 Deck Vapor Retarder and Insulation*

Vapor retarder over metal roof deck.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

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

SBS roofing with pre-finished metal flashings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	25	MAR-09

Event: Replace 3150m2 Membrane roofing

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$613,000	Unassigned

Updated: MAR-09

B3010.08.02 Metal Gutters and Downspouts**

Internal roof drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

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

Roof hatch from Mechanical room to roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Concrete masonry interior partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1010.02 Interior Demountable Partitions*

Vinyl clad demountable partitions in General Office, classrooms and library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1010.03 Interior Operable Folding Panel Partitions** - Gym

Gym divider curtain.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace gym divider screen

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$28,000	Unassigned

Updated: MAR-09

C1010.03 Interior Operable Folding Panel Partitions** - Gym/Stage

Folding panel wall between Gym and stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace Interior Operable Folding Panel Partitions

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$56,000	Unassigned

Updated: MAR-09

C1010.07 Interior Partition Firestopping*

Mortar and fibre wool.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1020.01 Interior Swinging Doors (& Hardware)*

Painted wood and hollow metal doors in pressed steel frames. Knob hardware.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

C1020.03 Interior Fire Doors*

Fire rated hollow metal door and pressed steel frame to Mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1020.04 Interior Sliding and Folding Doors*

Vinyl folding counter shutter at general office counter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1030.01 Visual Display Boards**

Whiteboards, chalkboards, tackboards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-09

Event: Replace 90 Visual Display Boards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$67,400	Unassigned

Updated: MAR-09

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

Pre-finished metal toilet partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

**Event: Replace 16 Fabricated
Compartments(Toilets/Showers)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$23,300	Unassigned

Updated: MAR-09

C1030.06 Handrails*

Painted wood wall mounted railings on stairs to stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1030.08 Interior Identifying Devices*

Plastic room labels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1030.12 Storage Shelving*

Painted and stained wood shelving in classrooms and storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C1030.14 Toilet, Bath, and Laundry Accessories *

Soap, towel, paper dispensers and waste receptacles. Mirrors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C3010.06 Tile Wall Finishes**

Ceramic tile at urinals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

Event: Replace 36m2 Tile Wall Finishes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$10,500	Unassigned

Updated: MAR-09

C3010.09 Acoustical Wall Treatment**

Fabric covered acoustical panels in Gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-09

Event: Replace 200m2 Acoustical Wall Treatment

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$43,600	Unassigned

Updated: MAR-09

C3010.11 Interior Wall Painting*

Painted concrete masonry.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	10	MAR-09

C3020.01.01 Epoxy Concrete Floor Finishes*

Sealed concrete floor to Mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

C3020.02 Tile Floor Finishes**

Ceramic tile floor finish to Boy's and Girl's washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	50	MAR-09

Event: Replace Tile Floor Finishes

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$16,600	Unassigned

Updated: MAR-09

C3020.04 Wood Flooring - Gym**

Vented wood strip flooring to gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	30	MAR-09

Event: Replace Gym Flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$100,000	Unassigned

Updated: MAR-09

C3020.04 Wood Flooring - Stage**

Wood strip flooring on stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	30	MAR-09

Event: Replace 170m2 wood flooring

Concern:

The flooring has exceeded it's lifespan.

Recommendation:

Replace wood strip flooring.

Consequences of Deferral:

Excessive maintenance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$47,300	Low

Updated: MAR-09

C3020.07 Resilient Flooring**

VAT flooring to classrooms, corridors, service rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-09

Event: Replace 2690m2 Resilient Flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$166,800	Unassigned

Updated: MAR-09

C3020.08 Carpet Flooring**

Carpet flooring in library, band room and general office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	15	MAR-09

Event: Replace 361m2 Carpet Flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$22,800	Unassigned

Updated: MAR-09

C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*

Gypsum board ceilings to storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2004	60	MAR-09

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

Suspended acoustic T-Bar ceilings in classrooms, corridors, washrooms and general office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	25	MAR-09

Event: Replace 3056m2 Acoustic Ceiling Treatment (Susp.T-Bar)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$140,600	Unassigned

Updated: MAR-09

C3030.07 Interior Ceiling Painting*

Painted gypsum ceilings in storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-09

S4 MECHANICAL

D2010.04 Sinks **

Throughout the school there are various single and double stainless steel sinks. The 3 groups of open style classrooms in the north and east side of the school each has 2 single stainless steel sinks with Crane faucets. The separate classrooms throughout the school each have their own single stainless steel sink with Crane faucet. The lunch and staff room have a double and single stainless steel sink respectively. Both sinks have Crane faucets. The science room in the center of the school has 2 single stainless steel sinks with typical crane faucets. The janitors room has its own cast iron pedestal mop sink.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace Approximately Twenty one Sinks

Concern:

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$21,900	Unassigned

Updated: MAR-09

D2010.08 Drinking Fountains / Coolers **

There are upgraded American standard drinking fountains throughout the school. Two original drinking fountains remain outside the office and one remains outside the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	35	MAR-09

Event: Replace Approximately six Drinking Fountains / Coolers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$8,800	Unassigned

Updated: MAR-09

D2010.09 Other Plumbing Fixtures *

There is a washer and dryer in the rear of the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

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

There are seven washrooms throughout the school. Student washrooms exist at the gymnasium entrance and on the northwest side of the school. The boys washroom by the gymnasium contains four water closets with flush valves, three porcelain wall mount basins with crane faucets and three floor mount urinals with concealed flush tank. One of these water closets is barrier free. The girls washroom by the gymnasium contains three typical basins and one accessible basin, three typical water closets, and one barrier free water closet. The second boys washroom contains two typical water closets, three typical basins, and three typical urinals. One of these urinals is cracked. The second girls washroom contains four typical water closets and one barrier free basin. The male and female staff each have their own typical lavatory by the staff room. The staff lavatory's have counter top basins equipped with Crane faucets. The infirmary also has a typical wall mount basin and floor mount water closet (typical). Various water closets have been relocated throughout the school to make room for barrier free facilities.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace Approximately Thirty six Washroom Fixtures (WC, Lav, Urnl)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$68,700	Unassigned

Updated: MAR-09

D2020.01.01 Pipes and Tubes: Domestic Water *

There is a 4" ductile iron supplying the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D2020.01.02 Valves: Domestic Water **

There are a variety of valves for the domestic water in the school. They appear to be in serviceable condition. The exterior hose bibs are frost free and key operated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

Event: Replace Valves: Domestic Water

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$26,800	Unassigned

Updated: MAR-09

D2020.01.03 Piping Specialties (Backflow Preventors) **

There are various backflow preventors in use on the different systems in the school. The main water supply has one 3" backflow preventor on the fire protection line and two 2" backflow preventors for the domestic water line feeding the school. The boiler feed has a 3/4" backflow and the outside hose bibs have one 2" backflow preventor. The water softener system also has a backflow preventor. All backflow preventors are Watts manufactured.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-09

Event: Replace Approximately Six Piping Specialties (Backflow Preventors)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$15,900	Unassigned

Updated: MAR-09

D2020.02.02 Plumbing Pumps: Domestic Water **

Hot water is circulated throughout the school with a TACO pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	20	MAR-09

Event: Replace The Plumbing Pump: Domestic Water

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,000	Unassigned

Updated: MAR-09

D2020.02.06 Domestic Water Heaters **

A John Wood 40 gallon hot water heater is located in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1990	20	MAR-09

Event: Replace The Domestic Water Heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,200	Unassigned

Updated: MAR-09

D2020.03 Water Supply Insulation: Domestic *

The interior domestic water insulation is fiberglass with canvas in exposed areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D2030.01 Waste and Vent Piping *

The waste vent piping in the school is cast iron and copper above ground with cast iron and plastic below ground.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D2040.01 Rain Water Drainage Piping Systems *

The roof drains for the school flow into the storm drainage system along with the exterior drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D2040.02.04 Roof Drains *

The roof drains have a cast iron body with an aluminum basket over top. The rain water volume is controlled with flow restricters in the roof drain openings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

D3010.02 Gas Supply Systems *

Gas is supplied from 3" underground high pressure line and distributed throughout the school in a 4" low pressure line.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	60	MAR-09

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

The school has two Bryan Boilers rated at 2,800,000 BTU each. The boilers have 3 circulation pumps. A horizontal non-bladder type expansion tank is mounted to the boiler room ceiling.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	35	MAR-09

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

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$88,200	Unassigned

Updated: MAR-09

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

The boiler vents are galvanized draft hoods and metalbestos chimneys.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	30	MAR-09

Event: Replace The Chimney (&Comb. Air): H.W. Boiler

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$21,000	Unassigned

Updated: MAR-09

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

A chemical treatment is provided through a pot feeder. There is also a side stream filter and site glass located on the system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D3030.06.02 Refrigerant Condensing Units **

A Trane air cooled condensing unit is located on the schools rooftop. The unit contains Refrigerant 22 and a 7.5 HP condenser fan motor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	25	MAR-09

Event: Replace The Refrigerant Condensing Unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$18,500	Unassigned

Updated: MAR-09

D3040.01.01 Air Handling Units: Air Distribution **

The school has two air handling units. One unit serves the school and contains both heating and cooling coils as well as a humidifier. The second unit contains only a heating coils and serves the schools gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace Two Air Handling Units: Air Distribution

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$312,500	Unassigned

Updated: MAR-09

D3040.01.04 Ducts: Air Distribution *

There is galvanized ductwork for air circulation within the school. Some of this ductwork is insulated. The gymnasium ductwork is located in a crawl space below its floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D3040.01.07 Air Outlets & Inlets:Air Distribution *

The majority of the air is provided to the classrooms and office area through EH Price square ceiling diffusers. Some rooms have adjustable steel square supply diffusers on the roof. The gymnasium's air is supplied from the floor through rectangular diffusers around the gyms perimeter. Air is returned to the system via unducted egg crate in the hallways and ducted adjustable return air grilles in the classroom ceilings. The air returns in the gymnasium are located on the walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D3040.03.01 Hot Water Distribution Systems **

The hot water heating piping from the boiler consists of welded or screwed schedule 40 steel pipe.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

Event: Replace Hot Water Distribution Systems

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$331,400	Unassigned

Updated: MAR-09

D3040.04.01 Fans: Exhaust **

Three bell type exhaust fans are located on the rooftop

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace Approximately Twelve Fans: Exhaust

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$13,800	Unassigned

Updated: MAR-09

D3040.04.03 Ducts: Exhaust *

Exhaust ducts are galvanized sheet metal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D3040.04.05 Air Outlets and Inlets: Exhaust *

The majority of the exhaust inlets are egg crate style grilles. Some inlets are adjustable stainless steel style grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D3050.01.01 Computer Room Air Conditioning Units**

There is no air conditioning unit for the computer room in the library as well as the schools server room. Ceiling tiles have been removed to provide additional ventilation to the detriment of the existing return air system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1971	30	MAR-09

Event: Upgrade Computer Room Air Conditioning

Concern:

There is no air conditioning for the library computer room and server room.

Recommendation:

Provide computer room air conditioning for computer and server rooms.

Consequences of Deferral:

Both rooms will be uncomfortably hot and may effect the performance of the units later on in there life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2009	\$60,000	Low

Updated: MAR-09

D3050.03 Humidifiers **

There is a spray wet media humidifier spraying a fine mist into the air handling unit supplying the school. The water for the humidifier is softened.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	25	MAR-09

Event: Replace The Humidifier

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$11,700	Unassigned

Updated: MAR-09

D3050.05.02 Fan Coil Units **

All of the school's entrances contain ceiling mounted force flow unit heaters. There is also a ceiling fan coil unit at the gymnasium's main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace Approximately Five Fan Coil Units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$58,700	Unassigned

Updated: MAR-09

D3050.05.03 Finned Tube Radiation **

The classrooms all have typical perimeter radiation. The science room has interior perimeter radiation. The stage and music room have upper wall mounted fin tube radiation. The water meter room also has fin tube radiation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	40	MAR-09

Event: Replace Finned Tube Radiation

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$157,900	Unassigned

Updated: MAR-09

D3050.05.06 Unit Heaters**

There is one unit heater in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace The Unit Heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,200	Unassigned

Updated: MAR-09

D3060.02.02 Pneumatic Controls**

The schools controls are pneumatic. A new Quincy air compressor as well as an air dryer was installed in 2007. The thermostats are Honeywell.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	40	MAR-09

Event: Replace Pneumatic Controls

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$110,000	Unassigned

Updated: MAR-09

D4010 Sprinklers: Fire Protection *

The schools stage is sprinklered.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	60	MAR-09

D4030.01 Fire Extinguisher, Cabinets and Accessories *

There are various wall hung ABC fire extinguishers and four fire hose cabinets throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

S5 ELECTRICAL

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

800A Westinghouse 120/208V 3 phase. Some room for expansion.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	40	MAR-09

<u>Capacity Size</u>	<u>Capacity Unit</u>
800	amps

Event: Replace Main Electrical Switchboards (Main Distribution)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$70,000	Unassigned

Updated: MAR-09

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

There are several 120/208V Westinghouse panels of various sizes located throughout the school servicing local loads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	30	MAR-09

Event: Replace all Electrical Branch Circuit Panelboards (Secondary Distribution)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$35,000	Unassigned

Updated: MAR-09

D5010.07.02 Motor Starters and Accessories **

There are some Cutler Hammer motor starters located on the walls of the mechanical room fed from a splitter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	30	MAR-09

Event: Replace Motor Starters and Accessories

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$6,000	Unassigned

Updated: MAR-09

D5020.01 Electrical Branch Wiring *

Wiring is original to building. Wire in conduit in mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	0	MAR-09

D5020.02.01 Lighting Accessories (Lighting Controls) *

Low voltage switching in corridors. Lighting contactors in corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	0	MAR-09

D5020.02.02.02 Interior Fluorescent Fixtures **

Original lighting is T-12 fluorescent with magnetic ballasts. Newer fixtures are T-8. New fixtures in mechanical room are T-8. Continue with changeout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	30	MAR-09

Event: Replace Interior Fluorescent Fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$215,000	Unassigned

Updated: MAR-09

D5020.02.02.05 Other Interior Fixtures*

Gym is equipped with Mercury Vapour high bays with remote ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

D5020.02.03.02 Emergency Lighting Battery Packs **

Battery packs and remote heads throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	20	MAR-09

Event: Replace Emergency Lighting Battery Packs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$15,000	Unassigned

Updated: MAR-09

D5020.02.03.03 Exit Signs *

Incandescent exit signs throughout. An efficient upgrade would be to upgrade these to LED exit signs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	0	MAR-09

D5020.03.01.04 Exterior H.P. Sodium Fixtures *

Exterior lighting is High Pressure Sodium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	0	MAR-09

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

Exterior lighting is controlled by photocells and timeclock.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	0	MAR-09

D5030.01 Detection and Fire Alarm **

Fire alarm system is in need of Replacement. Limited protection. A few heat and smoke detectors throughout, but a dated system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1971	25	MAR-09

Event: Replace Detection and Fire Alarm system

Concern:

Fire alarm system provides only limited protection.

Recommendation:

Update system throughout the school.

Consequences of Deferral:

Extensive damage before detection of a fire.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$70,000	High

Updated: MAR-09

D5030.02.02 Intrusion Detection **

Silent Knight system. Regency control panel at entrance. Motion sensors throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	25	MAR-09

Event: Replace Intrusion Detection

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$39,000	Unassigned

Updated: MAR-09

D5030.03 Clock and Program Systems *

Simplex Time clock.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	25	MAR-09

D5030.04.01 Telephone Systems *

The phone systems have been updated. Meridian system, Nortel phones throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1998	25	MAR-09

D5030.04.05 Local Area Network Systems *

Data systems upgraded 2000-2003 to new supernet c/w fibre optic entrance. Wireless internet throughout. Cat 5 cabling. UPS system.

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

D5030.05 Public Address and Music Systems **

Original BOGEN system. Tied to phone system. Paging done from phones.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	20	MAR-09

Event: Replace Public Address and Music Systems

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$16,000	Unassigned

Updated: MAR-09

D5030.06 Television Systems *

Coaxial cable run to classrooms. Not used.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theater and Stage Equipment *

Stage curtains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

E1090.04 Residential Equipment*

Range, frig, microwave, dishwasher in staff room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

4 side swing basketball backstops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

E2010.02 Fixed Casework**

Millwork bases with sinks in classrooms, Staff workroom, Library workroom, staff kitchen, infirmary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	35	MAR-09

Event: Replace 50m Fixed Casework

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$38,500	Unassigned

Updated: MAR-09

E2010.03.01 Blinds**

Horizontal louvre blinds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	30	MAR-09

Event: Replace 324m2 Blinds

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$37,600	Unassigned

Updated: MAR-09

F2020.01 Asbestos*

Vinyl floor tiles may contain asbestos. No broken tiles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

F2020.04 Mould*

No known mould known or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

F2020.09 Other Hazardous Materials*

No other hazardous materials known or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

S8 FUNCTIONAL ASSESSMENT

K3020 Indoor Environment

Limited natural light contribution to the interior spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

K4010.01 Barrier Free Route: Parking to Entrance*

Drop curb at sidewalk from asphalt parking lot. Level entry sidewalk to front entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

K4010.02 Barrier Free Entrances*

Power operated main entrance door.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1971	0	MAR-09

K4010.03 Barrier Free Interior Circulation*

Corridors and classrooms accessible.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1971	0	MAR-09

K4010.04 Barrier Free Washrooms*

No barrier free washroom facilities.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1971	0	MAR-09

Event: Install barrier free washroom

Concern:

There are no barrier free washroom facilities.

Recommendation:

Install barrier free washroom.

Consequences of Deferral:

Limited accessibility.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2009	\$16,000	Low

Updated: MAR-09

K4020 Building Code

General office counter shutter does not provide required fire separation from corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1971	0	MAR-09

Event: Install fire shutter

Concern:

Fire separation compromised.

Recommendation:

Install fire rated counter shutter.

Consequences of Deferral:

Life safety.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2009	\$9,000	Low

Updated: MAR-09