

# **RECAPP Facility Evaluation Report**

**Edmonton RCSSD #7**



## **Frere Antoine Catholic Elementary School**

B3118A  
Edmonton

**Facility Details**

**Building Name:** Frere Antoine Catholic Elem  
**Address:** 2850 Millwoods Road  
**Location:** Edmonton

**Building Id:** B3118A  
**Gross Area (sq. m):** 4,161.52  
**Replacement Cost:** \$10,746,709  
**Construction Year:** 0

**Evaluation Details**

**Evaluation Company:** Asset Evolution Incorporated (AEI)  
**Evaluation Date:** May 23 2008  
**Evaluator Name:** Mario Plastina

**Total Maintenance Events Next 5 years:** **\$1,939,000**  
**5 year Facility Condition Index (FCI):** **18.04%**

**General Summary:**

Frere Antoine Catholic Elementary is a one-storey school with a total building area is 4264m<sup>2</sup>. The original school was built in 1982 with an area of 2370m<sup>2</sup>. A four classroom addition was added in 1983 at the south end of the school with an area of 708m<sup>2</sup>. A cluster of five portables were added at the south end of the school with a total area of 515m<sup>2</sup>. A cluster of six portables plus washrooms were added at the north end of the school with a total area of 671m<sup>2</sup>. . The age of the portables vary from 1982 to 2005.

The school includes several classrooms, a gymnasium with a stage area, a library, computer room and a music room.

There are 415 children enrolled in the 2008 calendar year.

**Structural Summary:**

The foundations consist of cast-in-place concrete grade beams and spread footings. The original building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement. The roof comprises of a metal roof deck with steel structure supported by exterior & interior structural framed walls. The structural walls and columns are concrete block walls or poured in place concrete.

Overall the structural elements are in acceptable condition

**Envelope Summary:**

The exterior cladding consists of brick on the lower portion of the exterior walls and prefinished metal cladding along the upper portion of the walls. The exterior window units are aluminum frame with fixed and operable awning type units. The exterior doors are painted steel doors with hollow metal frames & glazed panels. The flat roof sections have a conventional 4-ply built-up roof assembly with stone ballast. The sloped roof sections are finished with prefinished metal roofing. Four skylights are located above the lunch room.

Overall, the envelope of the building is in acceptable condition.

**Interior Summary:**

Vinyl composite tile (VCT) & sheet vinyl flooring is located throughout the corridors and classroom areas. The library, general office area and staff room have a carpet floor finish. The gymnasium has a stained parquet hardwood floor. The mechanical room has a paint finish on the concrete slab. The washrooms, change rooms and vestibules have a ceramic and/or quarry tile floor finish. The majority of the interior walls are painted concrete block walls and gypsum board walls. The majority of the school has a suspended 2'x4' acoustical tile ceiling. The steel structure is painted and exposed in the gymnasiums. Lockers are located throughout the hallways and in the change rooms.

Overall, the interior finishes are in acceptable condition.

**Mechanical Summary:**

MECHANICAL SUMMARY (May 2008)

Primary building heating is provided by two natural gas fired hot water boilers which supply a hydronic distribution system which includes finned tube radiation cabinets, cabinet unit heaters (force flow units), unit heaters, and two air handling unit heating coils. There are two air handling units in the building which are mixed air systems; the main system (AHU1) serves the classroom and administration areas and the gymnasium system (AHU2) serves the gymnasium. Both of the mixed air ventilation systems have associated return air fans (RF1 and RF2). A split ductless direct expansion type air conditioning unit provides cooling for the computer room.

The fresh air supplied to the building by the air handling units is balanced by the exhaust air flow from the air handling units and from 13 sanitary, local, and general exhaust fans. Building HVAC controls are pneumatic and the control air supply system includes two air compressors mounted on a receiver tank and a refrigerated air dryer. There is a Building Management and Control System (BMCS) providing HVAC system control and monitoring functions (Andover model AC256M Plus).

Washrooms in the building include boy's and girl's washrooms at the northwest corner of the building, boy's and girl's washrooms near the southwest corner of the building, a washroom between the E.C.S. classroom (room 100) and the adjacent classroom (room 101), a washroom in the infirmary, male and female washrooms adjacent to the staff room, washrooms in the boy's and girl's change rooms, and handicap accessible boy's and girl's washrooms near the northwest corner of the gymnasium. Plumbing fixtures include floor mounted vitreous china flush valve type toilets (29), wall mounted vitreous china lavatories (4), counter mounted enameled steel lavatories (18), and wall mounted vitreous china flush valve type urinals (9).

Fire protection for the building consists of wall mounted fire extinguishers.

Current mechanical system requirements include the need for a backflow prevention device on the building domestic water supply (code upgrade), and replacement of the obsolete Andover building management and control system (difficulties have been reported in obtaining replacement parts). Overall, the building mechanical equipment and systems are in acceptable condition.

**Electrical Summary:**

The incoming hydro service to Frere Antoine school is a 120/208V, 3-phase, 4-wire service. The main switchboard is rated 800A, 120/208V with an 800A main breaker. Individual motor starters provide power for the mechanical equipment.

The wiring in the building is typically standard wiring in conduit.

The interior fluorescent lighting fixtures are typically T12 fixtures with magnetic ballasts. The exit lighting in the building consists of metal units with LED lamps. The emergency lighting is fed from battery powered emergency lighting units. The exterior lighting consists of surface mounted MH and incandescent fixtures.

The building is equipped with a Simplex 2001 fire alarm system. Detection and end devices include, smoke and heat detectors, bells and pull stations.

The various communications and security systems within the school include; a Partner Premier Series P-16128 security system that monitors motion detectors, a Nitsuko Telephone system and a Bogen MCP-35A P.A. System. A data network system has been installed within the school.

It is recommended, as routine maintenance, that a program for annual examination of major electrical components be instituted. Maintenance should include thermographic scans for hot spots and power shut down to allow examination of interior components for accumulated debris and signs of corrosion.

The main concerns for the school are the incandescent exterior lighting, the fire alarm system and the emergency lighting.

Overall the electrical elements for Frere Antoine school are in acceptable 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 - 1982 Section\***

The foundations consist of cast-in-place concrete grade beams and spread footings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**A1010 Standard Foundations - 1983 Section\***

The foundations consist of cast-in-place concrete grade beams and spread footings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**A1030 Slab on Grade - 1982 Section\***

The building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**A1030 Slab on Grade - 1983 Section\***

The building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B1010.01 Floor Structural Frame (Building Frame) - 1982 Section\***

Concrete structural flat slab supported by steel joists spanning between steel beams & column and foundation walls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B1010.01 Floor Structural Frame (Building Frame) - 1983 Section\***

Concrete structural flat slab supported by steel joists spanning between steel beams & column and foundation walls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1982 Section\***

Structural reinforced poured in place concrete and/or steel columns, structural framed interior walls and steel beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1983 Section\***

Structural reinforced poured in place concrete and/or steel columns, structural framed interior walls and steel beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B1010.07 Exterior Stairs - 1983 Section\***

Poured in place concrete stairs are located at the main south entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	40	OCT-08

**B1010.09 Floor Construction Fireproofing - 1982 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B1010.09 Floor Construction Fireproofing - 1983 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B1010.10 Floor Construction Firestopping - 1982 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B1010.10 Floor Construction Firestopping - 1983 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B1020.01 Roof Structural Frame - 1982 Section\***

Metal roof deck with steel & concrete structure supported by exterior & interior structural framed walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B1020.01 Roof Structural Frame - 1983 Section\***

Metal roof deck with steel & concrete structure supported by exterior & interior structural framed walls.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1983	0	OCT-08

**B1020.06 Roof Construction Fireproofing - 1982 Section\***

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

**B1020.06 Roof Construction Fireproofing - 1983 Section\***

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1983	0	OCT-08

**S2 ENVELOPE****B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1982 Section\***

Brick walls are located around the exterior perimeter of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	75	OCT-08

**B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1983 Section\***

Brick walls are located around the exterior perimeter of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	75	OCT-08

**B2010.01.06.03 Metal Siding\*\* - 1982 Section**

Prefinished metal panels are located on the upper portion of the exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace prefinished metal panels**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$150,000	Unassigned

**Updated:** OCT-08

**B2010.01.06.03 Metal Siding\*\* -1983 Section**

Prefinished metal panels are located on the upper portion of the exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	40	OCT-08

**Event: Replace prefinished metal panels**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$50,000	Unassigned

**Updated:** OCT-08

**B2010.01.09 Expansion Control: Exterior Wall Skin - 1982 Section\***

Expansion/control joints are located throughout the cladding assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B2010.01.09 Expansion Control: Exterior Wall Skin - 1983 Section\***

Expansion/control joints are located throughout the cladding assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1982 Section\*\***

Sealant is located around all window, door and exterior cladding assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event: Replace building sealant - 1982 Section**

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

**Updated:** OCT-08

**B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1983 Section\*\***

Sealant is located around all window, door and exterior cladding assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	20	OCT-08

**Event: Replace building sealant - 1983 Section**

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

**Updated:** OCT-08

**B2010.02.03 Masonry Units: Ext. Wall Const. - 1982 Section\***

The interior portion of the exterior walls comprises primarily of an insulated concrete block wall assembly

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B2010.02.03 Masonry Units: Ext. Wall Const. - 1983 Section\***

The interior portion of the exterior walls comprises primarily of an insulated concrete block wall assembly

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08



**B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1982 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1983 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B2010.06 Exterior Louvers, Grilles, and Screens - 1982 Section\***

Exterior metal louvres are located on the upper portion of the exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B2010.06 Exterior Louvers, Grilles, and Screens - 1983 Section\***

Exterior metal louvres are located on the upper portion of the exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B2010.09 Exterior Soffits - 1982 Section\***

The exterior soffit above the main entrance has a painted exterior gypsum board with a textured finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B2020.01.01.02 Aluminum Windows (Glass & Frame)\*\* - 1983 Section**

The windows are a combination of fixed aluminum frame double glazed units with some operable awning units. Security metals screens are on several windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	40	OCT-08

**Event: Replace Aluminum Windows - 1983 Section - 3 windows**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$15,000	Unassigned

**Updated:** OCT-08

**B2020.01.01.02 Aluminum Windows (Glass & Frame)\*\* -1982 Section**

The windows are a combination of fixed aluminum frame double glazed units with some operable awning units. Security metals screens are on several windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace Aluminum Windows - 1982 Section - 11 windows**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$60,000	Unassigned

**Updated:** OCT-08

**B2030.01.02 Steel-Framed Storefronts: Doors\*\* - All doors**

The majority of the entrance doors are painted metal doors in a painted steel frame. There are approximately 16 entrance doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	30	OCT-08

**Event: Replace B2030.01.02 Steel-Framed Storefronts - All sections-16 doors**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$80,000	Unassigned

**Updated:** OCT-08

**B3010.01 Deck Vapor Retarder and Insulation - 1982 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**B3010.01 Deck Vapor Retarder and Insulation - 1983 Section\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	0	OCT-08

**B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)\*\* - All Sections**

The school has a conventional 4ply-built-up bituminous roof assembly. Minor repairs have been recently conducted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	OCT-08

**Event: Replace BUR Roofing - All Sections - 2200m2**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$475,000	Unassigned

**Updated:** OCT-08

**B3010.07 Sheet Metal Roofing\*\* 1982 Section - Sloped metal assembly**

Sloped metal roof sections are located throughout the roof area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace sloped metal roof sections**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$75,000	Unassigned

**Updated:** OCT-08

**B3010.08.02 Metal Gutters and Downspouts - All Section\*\***

Prefinished metal gutters and downspouts are located on the sloped roof sections and pond onto the flat area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace Metal Gutters and Downspouts- All Sections**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$30,000	Unassigned

**Updated:** OCT-08

**B3020.01 Skylights\*\***

The skylights (4 Units) are fixed aluminum frame with sloped acrylic sections.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	OCT-08

**Event: Replace 4 skylights above the lunch room ( 5.76m2 each)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$20,000	Unassigned

**Updated:** OCT-08

**S3 INTERIOR****C1010.01.03 Unit Masonry Assemblies: Partitions -**

Interior partitions typically consist of masonry block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**C1010.01.07 Framed Partitions (Stud) -**

Several interior walls are metal frame with gypsum on both sides.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**C1010.05 Interior Windows - \***

Fixed interior glazed windows with GWG are located in the library, computer lab & general office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	0	OCT-08

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

The interior swing doors generally consist of painted solid core wood doors in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

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

The majority of the interior doors in the stairwells, utility rooms and corridors are painted hollow metal doors in a painted steel frame and GWG panel inserts. The utility rooms & corridors are labeled indicating fire rated doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**C1030.01 Visual Display Boards - \*\***

Tackboards and whiteboards are located in each teaching area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event: Replace Visual Display Boards**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$50,000	Unassigned

**Updated:** OCT-08

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

The washrooms & change rooms have prefinished metal toilet partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace washroom partitions**

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

**Updated:** OCT-08

**C1030.08 Interior Identifying Devices - \***

The room number or room name is mounted on or above the interior doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**C1030.10 Lockers - \*\***

Prefinished metal lockers are located throughout the corridors and in the change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace Lockers in Corridors**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$60,000	Unassigned

**Updated:** OCT-08

**C1030.12 Storage Shelving - \***

Metal storage shelving throughout custodial utility rooms and staff supply rooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

The washrooms are equipped with typical washroom accessories: Paper towel dispensers, toilet paper dispensers, hand-soap dispensers, waste bins and mirrors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**C2010 Stair Construction\***

The interior stairs to the gym are poured in place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	OCT-08

**C2020.05 Resilient Stair Finishes\*\* sheet vinyl**

The stairwells are finished with sheet vinyl flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	20	OCT-08

**Event: Replace sheet vinyl finish on gym stairs**

**Concern:**

The sheet vinyl is damaged and torn at the start of the riser. Water appears to have penetrated the sheet vinyl.

**Recommendation:**

Replace sheet vinyl at the stairs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$5,000	Low

**Updated:** OCT-08

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

The handrails and pickets are constructed of steel with a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**C2030.01 Ramp Construction\***

The interior ramp to the gym is poured in place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	OCT-08

**C2030.02 Ramp Finishes\***

The ramp has a quarry tile floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**C2030.03 Ramp Railings\***

The handrails and pickets are constructed of steel with a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	OCT-08

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

Stained wood paneling is located around the stage wall in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace wood paneling around stage area**

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

**Updated:** OCT-08

**C3010.06 Tile Wall Finishes - \*\* Ceramic tile**

Ceramic wall tile is located behind the boy's washroom urinals

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace ceramic wall tile in washrooms**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$12,000	Unassigned

**Updated:** OCT-08



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

Acoustical wall panels are located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event: Replace Acoustical Wall Treatment in the Gym**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$40,000	Unassigned

**Updated:** OCT-08

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

The interior gypsum board & concrete block wall partitions throughout the school have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	10	OCT-08

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

Painted/sealed concrete floors are located in the mechanical rooms and custodial areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	10	OCT-08

**C3020.02 Tile Floor Finishes - \*\* Ceramic & Quarry tile**

Ceramic/quarry floor tiles are located in the washrooms, change rooms & vestibule areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	OCT-08

**Event: Replace ceramic & quarry tile (250m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$40,000	Unassigned

**Updated:** OCT-08

**C3020.04 Wood Flooring\*\***

Hardwood parquet flooring is located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace parquet wood flooring ( 470m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$55,000	Unassigned

**Updated:** OCT-08

**C3020.07 Resilient Flooring - \*\* Sheet Vinyl**

Sheet vinyl is located throughout the majority of the classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event: Replace sheet vinyl flooring (1800m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$180,000	Unassigned

**Updated:** OCT-08

**C3020.07 Resilient Flooring\*\* VCT**

Vinyl composite tiles are located in four classrooms (100, 101, 105 & 109).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	20	OCT-08

**Event: Replace VCT flooring ( 400m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$25,000	Unassigned

**Updated:** OCT-08

**C3020.08 Carpet Flooring - \*\***

Carpeting is located in the staff area, library & administrative areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1998	15	OCT-08

**Event: Replace Carpet Flooring - 300m2**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2013	\$30,000	Unassigned

**Updated:** OCT-08

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

The majority of the ceilings have a 2'-0"x4'-0"suspended acoustical tile assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	OCT-08

**Event: Replace suspended acoustical tile ceiling (2400m2)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$150,000	Unassigned

**Updated:** OCT-08

**C3030.07 Interior Ceiling Painting - \***

All the gypsum board & exposed steel structures have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**S4 MECHANICAL****D2010.04 Sinks - \*\***

There are 14 sinks in the building including two plastic mop sinks located in janitor closets, one enameled steel laundry tub (two compartment) located in room 107, and general purpose stainless steel sinks. The general purpose stainless steel sinks include nine single bowl sinks and two double bowl sinks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event:** **Replace the building sinks (2 mop sinks, 1 laundry tub, and 11 stainless steel general purpose sinks)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$21,000	Unassigned

**Updated:** OCT-08

**D2010.05 Showers - \*\***

There are two showers in the building located in the boy's and girl's change rooms (six shower stations each). The change room shower rooms are ceramic tiled rooms with wall mounted shower heads and controls. In the girl's change room, shower dividers are used. The replacement cost for these showers includes the shower trim only and does not include the shower room wall and floor finishes or dividers. The change room showers do not appear to be used.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event:** **Replace the boy's and girl's change room showers (trim only)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$12,000	Unassigned

**Updated:** OCT-08

**D2010.08 Drinking Fountains / Coolers - c.1982\*\***

There are seven drinking fountains in the building. This element covers the six original c.1982 drinking fountains including four wall mounted vitreous china drinking fountains in the corridors and two wall mounted stainless steel drinking fountains at the gymnasium entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	OCT-08

**Event:** **Replace the six c.1982 original wall mounted drinking fountains**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$9,000	Unassigned

**Updated:** OCT-08

**D2010.08 Drinking Fountains / Coolers - c.2000\*\***

There are seven drinking fountains in the building. This element covers one wall mounted stainless steel drinking fountain (located near the northwest corner of the building) which was installed to replace one of the original wall mounted vitreous china drinking fountains (c.2000 estimated installation date).

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
5 - Good	2000	35	OCT-08

**Event: Replace the c.2000 wall mounted stainless steel drinking fountain located near the northwest corner of the building**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2035	\$2,000	Unassigned

**Updated:** OCT-08

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

Washrooms in the building include boy's and girl's washrooms at the northwest corner of the building, boy's and girl's washrooms near the southwest corner of the building, a washroom between the E.C.S. classroom (room 100) and the adjacent classroom (room 101), a washroom in the infirmary, male and female washrooms adjacent to the staff room, washrooms in the boy's and girl's change rooms, and handicap accessible boy's and girl's washrooms near the northwest corner of the gymnasium. Plumbing fixtures include floor mounted vitreous china flush valve type toilets (29), wall mounted vitreous china lavatories (4), counter mounted enameled steel lavatories (18), and wall mounted vitreous china flush valve type urinals (9).

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	30	OCT-08

**Event: Replace the washroom plumbing fixtures (29 toilets, 22 lavatories and 9 urinals)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2012	\$105,000	Unassigned

**Updated:** OCT-08

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

The domestic water supply to the building enters the meter room near the northeast corner of the building (100 mm diameter supply line). The water supply is metered (38 mm diameter water meter). Domestic water piping is generally copper with brass valves, and fiberglass insulation is used to prevent heat loss and condensation. There is some galvanized steel water piping in the meter room.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

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

Domestic water system valves include system isolation valves and fixture isolation valves. The domestic water system valves are generally brass, with some steel valves used in the meter room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace the domestic water distribution system isolation valves**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$30,000	Unassigned

**Updated:** OCT-08

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

The domestic water supply to the building enters the meter room near the northeast corner of the building (100 mm diameter supply line). There is no backflow prevention device on the domestic water supply to the building. In the mechanical room, there is a backflow prevention device (19 mm diameter) to protect the building domestic water system from contamination caused by backflow from the HVAC systems (estimated date of installation c.2005).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	20	OCT-08

**Event: Install a backflow prevention device on the building domestic water supply (100 mm diameter)**

**Concern:**

Potential contamination of the municipal water supply caused by backflow from the building.

**Recommendation:**

Install a backflow prevention device on the building domestic water supply (100 mm diameter).

**Consequences of Deferral:**

Potential contamination of the municipal water supply caused by backflow from the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2009	\$8,000	Low

**Updated:** OCT-08

**Event: Replace the backflow prevention device in the mechanical room (1 @ 19 mm diameter)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$1,500	Unassigned

**Updated:** OCT-08

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

There is a domestic hot water system circulation pump which maintains the domestic hot water loop at temperature. This pump is located in the mechanical room between the domestic hot water heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event:** Replace the domestic hot water circulation pump located in the mechanical room

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,000	Unassigned

**Updated:** OCT-08

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

Two natural gas fired domestic hot water heaters located in the mechanical room provide domestic hot water for the building sinks, lavatories and showers. The domestic hot water heaters are A.O. Smith model BT-500H-770S with an input heating capacity of 500,000 Btu/h (146.6 kW) and a volume of 69 US gallons (261 L) each.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event:** Replace the two domestic hot water heaters located in the mechanical room

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

**Updated:** OCT-08

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

Where visible, the domestic water piping is insulated with fiberglass insulation to prevent heat loss and condensation. In the mechanical room, the piping insulation is protected with a painted canvas outer cover.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

Visible waste and vent piping is generally copper (small diameters). Because the school is primarily on one level, most of the waste piping is located below grade. The below grade sanitary piping is probably cast iron. The sanitary drainage system exits the building on the north side (150 mm diameter).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

Standard roof drains are used to provide storm water drainage for the flat roof areas. The storm water drainage piping is generally cast iron. Typical rain water leaders (RWLs) are 100 mm diameter and 150 mm diameter. The storm drainage system exits the building on the east side at the north end.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**D2040.02.04 Roof Drains - \***

Standard roof drains are used to provide storm water drainage of the flat roof areas (11 total). The roof drains are equipped with metal strainers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

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

The natural gas supply is underground to the building and the gas meter and pressure reducing station are located in the meter room near the northeast corner of the building. The natural gas piping is steel. Natural gas service to the north portables is also underground. Natural gas service to the south portables is from the main building (the gas piping is located inside the building).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	60	OCT-08

**D3020.01.01 Heating Boilers & Accessories: Steam\*\***

A Bryan steam boiler located in the mechanical room provides steam for building humidification, although this boiler does not appear to be used. There is no feedwater treatment for the steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	OCT-08

**Event: Replace the humidification steam boiler located in the mechanical room**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$50,000	Unassigned

**Updated:** OCT-08



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

The steam boiler breeching ties into the common combustion gas discharge system for the mechanical room (this element covers only the breeching related to the steam boiler). See "D3020.02.02 Chimneys (&Comb. Air): H.W. Boiler - \*\*\*" for the breeching related to the hot water boilers and the domestic hot water heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	OCT-08

**Event: Replace the breeching which ties the steam boiler combustion gas discharge into the common mechanical room combustion gas discharge system**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$5,000	Unassigned

**Updated:** OCT-08

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

There are two natural gas fired hot water heating boilers for building heating (boilers B1 and B2). The heating boilers are located in the mechanical room. The boilers are Teledyne Laars model HO-1266-CN01 with an input heating capacity of 1,139,000 Btu/h or 333.8 kW each.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	OCT-08

**Event: Replace the hot water heating boilers B1 and B2 located in the mechanical room**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$80,000	Unassigned

**Updated:** OCT-08

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

The combustion gases from the two hot water heating boilers (B1 and B2) discharge through the roof of the building in a common stack. The combustion gases from the domestic hot water heaters and the steam boiler also discharge through the same stack. This element includes the common components of the mechanical room combustion gas discharge system including the breeching related to the hot water heating boilers and the domestic hot water heaters, but not including the breeching specific only to the steam humidification boiler (see "D3020.01.03 Chimneys (&Comb. Air) : Steam Boilers\*\*").

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	30	OCT-08

**Event: Replace the mechanical room combustion gas discharge system (including common components and components related to the hot water boilers and the domestic hot water heaters, but excluding components related to the steam boiler)**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2012	\$20,000	Unassigned

**Updated:** OCT-08

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

Water treatment for the closed loop hot water heating system (which includes the two hot water heating boilers B1 and B2) consists of manual chemical addition via a chemical pot feeder and a sidestream cartridge filter in parallel with the circulation pumps.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

**D3040.01.01 Air Handling Units: Air Distribution - \*\***

There are two Engineered Air packaged air handling units for the building. The main air handling unit (AHU1) serves the classrooms and the administration area (all of the school except the gymnasium). This constant volume mixed air system includes a supply fan (SF1), a hot water heating coil, a steam humidifier, and a filter section. Air handling unit AHU1 has an associated return air fan (RF1) and the supply and return air fans are both located in the mechanical room. The capacity of AHU1 is 14,200 cfm (6,702 L/s). The gymnasium air handling unit (AHU2) serves the gymnasium. This constant volume mixed air system includes a supply fan (SF2), a hot water heating coil, a steam humidifier, and a filter section. Air handling unit AHU2 has an associated return air fan (RF2) and the supply and return air fans are both located in the mechanical room. The capacity of AHU2 is 8,000 cfm (3,776 L/s).

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	30	OCT-08

**Event: Replace packaged air handling units AHU1 and AHU2 located in the mechanical room**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2012	\$220,000	Unassigned

**Updated:** OCT-08

**D3040.01.02 Fans: Air Distribution (Remote from AHU) - \***

Air distribution fans for the building other than the air handling unit supply fans include the two return air fans associated with air handling units AHU1 and AHU2 (return air fans RF1 and RF2). Return air fan RF1 is associated with air handling unit AHU1 (supply fan SF1), and return air fan RF2 is associated with air handling unit AHU2 (supply fan SF2). Return air fans RF1 and RF2 are axial type fans and both return air fans are located in the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**D3040.01.04 Ducts: Air Distribution - \***

Air distribution ducts include the fresh air, supply air, return air and exhaust air duct systems for the two air handling units (main air handling unit AHU1 and gymnasium air handling unit AHU2). The duct systems include associated components not specifically listed elsewhere, including duct insulation, turning vanes, dampers, hangers, supports, etc.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

Air outlets and inlets include supply air diffusers, return air grilles, and air transfer grilles. Supply air diffusers include square diffusers designed to fit the suspended (T-bar) ceiling grid, and in some locations (typically over exterior doors), linear supply air diffusers. Duct mounted grille type supply air diffusers are used in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

Steam distribution in the building includes the steam supply piping from the steam boiler to the two steam humidifiers. This element also includes the steam condensate return piping from the humidifiers to the condensate return tank. The condensate return tank is located in the mechanical room and also acts as the feedwater system for the steam boiler. The tank is equipped with a make-up water system and one feedwater pump. This element includes all components of the steam and condensate distribution systems, including piping, piping insulation, valves, piping specialties such as steam traps, and the condensate return/steam boiler feedwater system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace the steam supply piping, condensate return piping and steam boiler feedwater system (all located in the mechanical room)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$28,000	Unassigned

**Updated:** OCT-08

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

The hot water heating system provides hot water to the air handling unit heating coils (in air handling unit AHU1 and air handling unit AHU2) and to the building hydronic heating system terminal units (finned tube radiation cabinets, unit heaters, and cabinet heaters). The hydronic distribution system includes all components of the closed loop heating system including piping, valves, piping insulation, piping specialties, circulation pumps, and expansion tanks. There are two primary hot water circulation pumps (P1 and P2), and one expansion tank located in the mechanical room. In addition, there are heating coil hot water circulation pumps for the two air handling unit hot water heating coils.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	40	OCT-08

**Event: Replace the building heating hot water distribution system**

<b><u>Type</u></b>	<b><u>Year</u></b>	<b><u>Cost</u></b>	<b><u>Priority</u></b>
Lifecycle Replacement	2022	\$290,000	Unassigned

**Updated:** OCT-08

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

There are 13 exhaust fans for the building, including sanitary exhaust fans, science room exhaust fans, and general exhaust fans. The exhaust fans are generally small ceiling mounted or ceiling space mounted fans which discharge through the roof via gooseneck vents.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	30	OCT-08

**Event: Replace the building exhaust fans (13)**

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

**Updated:** OCT-08

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

Exhaust duct systems include the collection and discharge ducts associated with the 13 building exhaust fans. Most of the exhaust fans discharge through the roof via gooseneck vents.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

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

Exhaust air inlets include the inlet grilles and hoods associated with the exhaust system collection ducts, and exhaust air outlets include the exhaust system discharge louvres and gooseneck vents, as applicable.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

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

A Carrier split ductless direct expansion type air conditioning system provides space cooling for the computer room. The air conditioning condenser is located on the roof above the computer room and the evaporator (fan coil unit) is ceiling mounted in the computer room. The estimated installation date is c.2000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	30	OCT-08

**Event:** Replace the split ductless direct expansion type air conditioning unit for the computer room

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$7,000	Unassigned

**Updated:** OCT-08

**D3050.03 Humidifiers - \*\***

The two building air handling systems (classroom and gymnasium systems) are equipped with duct mounted steam humidifiers which are provided with steam from the steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	OCT-08

**Event:** Replace the two duct mounted steam humidifiers for the two air handling systems (the humidifiers are located in the mechanical room)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$11,000	Unassigned

**Updated:** OCT-08

**D3050.05.01 Convectors - Cabinet Unit Heaters\*\***

There are five hot water cabinet unit heaters (CUH1 through CUH5) which provide heating at the building entrances where the heating loads are relatively high. The cabinet unit heaters are located in the ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event:** Replace the five building entrance cabinet unit heaters (CUH1 through CUH5) located in the ceiling space above the entrances

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

**Updated:** OCT-08

**D3050.05.03 Finned Tube Radiation - \*\***

The hot water heating system provides perimeter heating and interior room heating for most of the building using finned tube radiation cabinets (finned tube radiation cabinets are used for heating in the interior rooms, as well as for the perimeter rooms, because there are no reheat coils in the air distribution systems).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event:** Replace the building finned tube radiation cabinets

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$165,000	Unassigned

**Updated:** OCT-08

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

Three hot water unit heaters are used in the building. Unit heaters UH1 and UH2 provide heating in the gymnasium, and unit heater UH3 provides combustion air preheating in the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event:** Replace the three building unit heaters UH1, UH2 and UH3 (two in the gymnasium and one in the mechanical room)

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

**Updated:** OCT-08

**D3060.02.02 Pneumatic Controls\*\***

Most of the building HVAC system controls and actuators are pneumatic (there are some electric controls used for the cabinet unit heaters and the unit heaters). There is an Andover AC256M Plus Building Management and Control System (BMCS) which provides some control and monitoring functions, although the HVAC equipment actuators and room thermostats are pneumatic. The control air supply system is located in the mechanical room and consists of two air compressors (AC1 and AC2) mounted on an air receiver tank with a wall mounted refrigerated air dryer. Pneumatic controls include control valves for most of the hydronic terminal units, control valves for the air handling unit heating coils, and damper actuators for the air handling units. This element includes the pneumatic distribution system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event:** Replace the HVAC system pneumatic controls including the control air supply system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2022	\$48,000	Unassigned

**Updated:** OCT-08

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

The building is equipped with a central Building Management and Control System (Andover Controls model AC256M Plus), which provides control and monitoring functions for the main HVAC equipment, although the HVAC equipment actuators and room thermostats are generally pneumatic.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	20	OCT-08

**Event: Replace the Andover AC256M Plus Building Management and Control System (BMCS)**

**Concern:**

The Building Management and Control System (BMCS) is obsolete and replacement parts for the Andover system are becoming difficult to obtain.

**Recommendation:**

Replace the Andover AC256M Plus Building Management and Control System (BMCS).

**Consequences of Deferral:**

Increased maintenance and repair costs and potential loss of service.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$55,000	Low

**Updated:** OCT-08

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

Fire extinguishers are located throughout the building on wall brackets and in recessed wall cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**S5 ELECTRICAL****D5010.03 Main Electrical Switchboards (Main Distribution)\*\***

The incoming hydro service to Frere Antoine School is a 120/208V, 3-phase, 4-wire service from an EPCOR padmounted transformer, located on the East side of the school. The EPCOR meter is located in the main electrical room. The main electrical switchboard is a Square D switchboard rated at 800A, 120/208V, 3-phase, 4-wire. The switchboard has an 800A main circuit breaker and a moulded case breaker distribution section. The main switchboard provides power for nine branch circuit panels. The main electrical switchboard is original equipment that was installed when the school was constructed. There is space within the switchboard for future breakers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	40	OCT-08

**Event: Replace Main Electrical Switchboard**

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

**Updated:** OCT-08

**D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)\*\* - 1982**

The majority of the electrical branch circuit panelboards are Square D panels that were installed when the building was originally constructed. There are 7 original Square D panels in the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace Electrical Branch Circuit Panelboards (1982)**

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

**Updated:** OCT-08

**D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)\*\* - 2006**

A new Square D 42-circuit panel was installed in 2006 for the playground lighting. The panel feeding the individual portable panels was also installed within the last 2-3 years.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	30	OCT-08

**Event: Replace Electrical Branch Circuit Panelboards (2006)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2036	\$8,000	Unassigned

**Updated:** OCT-08



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

Individual Westinghouse motor starters are located in the mechanical rooms. There are motor rated starter switches within the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace Motor Starters and Accessories**

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

**Updated:** OCT-08

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

The majority of the cabling is standard building wire in EMT conduit. Armoured cable has been provided, in selected locations, for final connections to mechanical and miscellaneous equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	OCT-08

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

The majority of the school lighting is controlled with line voltage switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

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

The typical lighting within the school consists of surface mounted T12 fluorescent wraps. Strip fluorescent T12 fluorescent lighting fixtures have been used for storage rooms, service rooms and the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace T12 lamps and ballasts with T8.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$135,000	Unassigned

**Updated:** OCT-08

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

The emergency lighting within the school is provided by emergency lighting battery units and integral and remote lighting heads. Some of the remote lighting heads are protected by lexan cubes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	20	OCT-08

**Event: Replace Emergency Lighting Battery Packs**

**Concern:**

The emergency lighting battery packs are not reliable.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$12,000	High

**Updated:** OCT-08

**D5020.02.03.03 Exit Signs\***

Exit signs are generally located to indicate building exits and egress routes to exits. The exit signs have LED lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	30	OCT-08

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

Wall mounted, exterior incandescent fixtures with acrylic lenses have been installed in some areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	30	OCT-08

**Event: Replace Exterior Incandescent Lighting Fixtures**

**Concern:**

The existing acrylic incandescent exterior fixtures are not energy efficient. Discolouration of the lenses has affected the light output.

**Recommendation:**

Replace incandescent exterior fixtures with energy efficient H.I.D. wallpack fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$3,000	Low

**Updated:** OCT-08

**D5020.03.01.03 Exterior Metal Halide Fixtures\***

Metal Halide wallpack fixtures have been provided on the exterior walls. An H.I.D. floodlight has been installed on the South wall of the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	30	OCT-08

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

The exterior lighting is controlled via relays.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

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

The fire alarm system control panel is a Simplex 2001 panel with 10 active zones and 2 spare zones. The control panel is located in the main entrance vestibule and there is a passive graphic adjacent to the control panel. A remote annunciator has been provided at the South entrance. 10" dia. bells are the audible devices within the school, strobes have not been provided. The September 2007 fire alarm testing report indicated that a heat detector in Portable #3 required replacement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	25	OCT-08

**Event: Replace Fire Alarm System**

**Concern:**

The existing Simplex fire alarm system is no longer manufactured. Replacement parts are not readily available.

**Recommendation:**

Replace existing fire alarm system with new addressable system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$55,000	High

**Updated:** OCT-08

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

A Partner Premier Series P-16128 security system has been installed in the school. A security system keypad has been installed at the main entrance. PIR motion detectors have been provided throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	25	OCT-08

**Event: Replace Intrusion Detection System**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$20,000	Unassigned

**Updated:** OCT-08

**D5030.02.04 Video Surveillance\*\***

There are approximately 16 cameras for the school including 3 exterior cameras. A monitor and recording system for the surveillance system are located in the server room off computer room 105. The cameras are all Pan/Tilt/Zoom cameras.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	25	OCT-08

**Event: Replace Video Surveillance System**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2032	\$20,000	Unassigned

**Updated:** OCT-08

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

The clocks within the school are analogue Atomic clocks by La Crosse Technology. The clocks are radio controlled self correcting battery powered clocks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	25	OCT-08

**D5030.04.01 Telephone Systems\***

The telephone system is an NEC Aspire 1P1NA-8KSU-A1 system. NEC telephone handsets are located in areas such as the classrooms and general office. The main telephone equipment is located in the main electrical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	25	OCT-08

**D5030.04.05 Local Area Network Systems\***

The Data system server is located in the server room adjacent to computer room 105. Cat. 5 cables are used for the network wiring within the school. Supernet has been provided within the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	15	OCT-08

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

The P.A. system is a Bogen MCP-35A system with 50 call points. The main console is located in the general office and there are call switches in the classrooms. Recessed round speakers are located in the ceilings of the corridors and classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	20	OCT-08

**Event: Replace Public Address System**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$20,000	Unassigned

**Updated:** OCT-08

**D5030.06 Television Systems\***

The incoming cable TV service has been brought into the main electrical room. Cable TV outlets have been provided in selected classrooms.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	20	OCT-08

**S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION****E1090.04 Residential Equipment - \***

The lunch room and staff room is equipped with refrigerator, stoves, microwaves and several small kitchen appliances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

Fixed & movable basketball hoops are located in the gymnasium. A climbing apparatus is located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

**E2010.02 Fixed Casework - \*\***

Each classroom is equipped with custom wood open faced and/or painted cabinet units along the exterior wall. The staff room & lunch room have stained wood upper and lower cabinet units. The library has fixed and moveable wood shelving casework. Glass display cabinets are located in the main entrance area and in the corridors. The staff lounge & washrooms have plastic laminate counter tops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	35	OCT-08

**Event: Replace All Millwork**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2017	\$250,000	Unassigned

**Updated:** OCT-08

**E2010.03.01 Blinds - \*\***

Several windows throughout the school have either vertical & roller type blinds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	OCT-08

**Event: Replace all window coverings**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$30,000	Unassigned

**Updated:** OCT-08

**F1010.02.04 Portable and Mobile Buildings - \* Units 197 to 202 & C18(Wet unit)**

Pod - Units 197 to 202 & C18(Wet unit) The unit contains a boy's washroom, a girl's washroom, a unisex staff washroom, a janitor's closet, a mechanical room, and two resource rooms (offices). - Built in 1982

**Structure:**

- Wood frame construction with piles bearing on undisturbed soil.

**Envelope:**

- Cladding - A painted plywood sheathing skirt with vents is located at the base of the elevation. The exterior skin has a painted wood siding finish with wood/metal framing construction.
- Windows - The exterior windows are aluminum frame fixed and operable awning type windows with exterior metal security screens. Several windows have been replaced in 1993.
- Roof Covering - The roofs have a SBS roof assembly. Several roofs have been repaired.
- Painted wood framed stairs are located at the entrances.

**Interior:**

- Flooring - VCT flooring replaced in 1997.
- Ceiling - 2'x4' Suspended Acoustical tile ceiling
- Walls - Painted and /or vinyl covered gypsum board walls with either metal or wood wall construction.
- Doors - Fire-rated steel door & frame assembly. Screen on the exterior exits.
- Equipment - Whiteboards, tackboards, open wood shelving, wall mounted coat hooks & curtains.
- C18 Unit - washrooms - equipped with prefinished metal toilet partitions, plastic laminate vanities & typical washroom accessories

Architectural elements within the portables were found to be in acceptable condition.

**Mechanical**

Portables 197, 198, 199, 200, 201 and 202 (all c.1982): Portable heating is provided by natural gas fired forced air furnaces which provide a mixture of fresh air and return air to the conditioned spaces via a supply air duct systems which run down one side of the classroom. Temperature control is independent and is typically provided by a digital or analog electric thermostat. The classroom portables do not have any plumbing. Fire extinguishers for fire protection are located in the portable access corridor. Exterior storm drainage for the portables consists of scuppers and gutters connected to downspouts which discharge to grade.

Portable Wet Unit (C18, assumed to be c.1982): The unit contains a boy's washroom, a girl's washroom, a unisex staff washroom, a janitor's closet, a mechanical room, and two resource rooms (offices). Plumbing fixtures include five floor mounted tank type toilets, four counter mounted enameled steel lavatories, one wall mounted vitreous china lavatory, two wall mounted flush valve type urinals, one plastic mop sink, and one wall mounted vitreous china drinking fountain. The mechanical room contains a natural gas fired furnace, a natural gas fired domestic hot water heater (c.2008), and a fire extinguisher.

**Electrical**

Portables 197-202, 221, 222 & 249

Each portable classroom is provided with a 120/240V, single-phase panel (connected to the school electrical distribution system) that provides power for the individual classroom. The lighting fixture used within each portable classroom is typically a surface mounted, T12, fluorescent, wrap-around fixture. Recessed round P.A. speakers, a call switch, a telephone and a PIR motion detector are typically provided in each portable classroom. The portables are connected to the school fire alarm system.

The electrical elements within the portables were found to be in acceptable condition.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
3 - Marginal	1982	0	OCT-08

**Event: Repair doors & replace hardware (14 doors)**

**Concern:**

The exterior doors & hardware at the link and in the individual portables are damaged & deteriorated.

**Recommendation:**

Replace hardware where required and repair/repaint doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$12,000	Medium

**Updated:** OCT-08

**Event: Replace the portable furnaces - Units 197 to 202**

**Concern:**

Potential for carbon monoxide leakage due to furnace heat exchanger cracking

**Recommendation:**

Replace the portable furnaces

**Consequences of Deferral:**

Potential negative health impact due to carbon monoxide leakage

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$30,000	Low

**Updated:** OCT-08



**F1010.02.04 Portable and Mobile Buildings\* - Units 221, 222 & 249**

Units 221, 222 Built in 1986 & Unit 249 - Built in 1991

**Structure:**

- Wood frame construction with piles bearing on undisturbed soil.

**Envelope:**

- Cladding - A painted plywood sheathing skirt with vents is located at the base of the elevation. The exterior skin has a painted wood siding finish and/or metal siding(Unit 287A) with wood/metal framing construction.
- Windows - The exterior windows are aluminum frame fixed and operable awning type windows with exterior metal security screens.
- Roof Covering - The roofs have a SBS roof assembly.
- Painted/stained wood framed stairs are located at the entrances.

**Interior:**

- Flooring - VCT flooring replaced in 1998.
- Ceiling - 2'x4' Suspended Acoustical tile ceiling
- Walls - Painted and /or vinyl covered gypsum board walls with either metal or wood wall construction.
- Doors - Fire-rated steel door & frame assembly. Screen on the exterior exits.
- Equipment - Whiteboards, tackboards, open wood shelving, wall mounted coat hooks & curtains.

Architectural elements within the portables were found to be in acceptable condition.

**Mechanical**

Portables 221 (c.1986), 222 (c.1986), 249 (c.1991): Portable heating is provided by natural gas fired forced air furnaces which provide a mixture of fresh air and return air to the conditioned spaces via a supply air duct systems which run down one side of the classroom. Temperature control is independent and is typically provided by a digital or analog electric thermostat. The classroom portables do not have any plumbing. Fire extinguishers for fire protection are located in the portable access corridor. Exterior storm drainage for the portables consists of scuppers and gutters connected to downspouts which discharge to grade.

Portables 221, 222, 249 & 278 are in acceptable condition

**Electrical**

Portables 221, 222 & 249

Each portable classroom is provided with a 120/240V, single-phase panel (connected to the school electrical distribution system) that provides power for the individual classroom. The lighting fixture used within each portable classroom is typically a surface mounted, T12, fluorescent, wrap-around fixture. Recessed round P.A. speakers, a call switch, a telephone and a PIR motion detector are typically provided in each portable classroom. The portables are connected to the school fire alarm system.

The electrical elements within the portables were found to be in acceptable condition.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1987	30	OCT-08

**F1010.02.04 Portable and Mobile Buildings\* Units 278 & 287A**

Units 278 & 287A - Built in 2005

**Structure:**

- Wood frame construction with piles bearing on undisturbed soil.

**Envelope:**

- Cladding - A painted plywood sheathing skirt with vents is located at the base of the elevation. The exterior skin has a painted wood siding finish and/or metal siding(Unit 287A) with wood/metal framing construction.
- Windows - The exterior windows are aluminum frame fixed and operable awning type windows with exterior metal security screens.
- Roof Covering - The roofs have a SBS roof assembly. The roof on unit 287A has a single-ply EPDM roof assembly.
- Painted/stained wood framed stairs are located at the entrances.

**Interior:**

- Flooring - VCT flooring. Flooring in Unit 287A- Sheet Vinyl flooring.
- Ceiling - 2'x4' Suspended Acoustical tile ceiling
- Walls - Painted and /or vinyl covered gypsum board walls with either metal or wood wall construction.
- Doors - Fire-rated steel door & frame assembly. Screen on the exterior exits.
- Equipment - Whiteboards, tackboards, open wood shelving, wall mounted coat hooks & curtains.

Architectural elements within the portables were found to be in good condition.

**Mechanical**

Portable -278 (c.2005): Portable heating is provided by natural gas fired forced air furnaces which provide a mixture of fresh air and return air to the conditioned spaces via a supply air duct systems which run down one side of the classroom. Temperature control is independent and is typically provided by a digital or analog electric thermostat. The classroom portables do not have any plumbing. Fire extinguishers for fire protection are located in the portable access corridor. Exterior storm drainage for the portables consists of scuppers and gutters connected to downspouts which discharge to grade.

Portables 278 are in acceptable condition

Portable - 287 (c.2005): Portable heating is provided by a natural gas fired forced air furnace which provides a mixture of fresh air and return air to the conditioned space via a supply air duct system located in the ceiling space. Temperature control is independent and is provided by a digital electric thermostat, and the furnace controls are electric/electronic ( Andover ). The portable does not have any plumbing. Fire extinguishers for fire protection are located in the portable access corridor. Exterior storm drainage for the portable consists of scuppers and downspouts which discharge to grade.

Portable 287 is in good condition

**Electrical**

Portables 278 and 287

Portables 278 and 287 are provided with 120/240V panels (connected to the school electrical distribution system) that provide power for the individual classroom. The lighting fixture used in each portable classroom is a recessed 3-Lamp, 2 ft, x 4 ft. T8 fluorescent fixture. A recessed, round P.A. speaker, call switch, telephone and a PIR motion detector have been provided in the portable classrooms. The portables are connected to the school fire alarm system. Combination exit/emergency lighting units have been provided in the portables.

The electrical elements within portables 278 and 287 were found to be in good condition.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	2005	30	OCT-08

**F2020.01 Asbestos - \***

Please see HAZARDOUS BUILDING MATERIALS SURVEY conducted by Golder Associates Ltd. Dated April 18th,2007 for details.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

**F2020.04 Mould - \***

Please see HAZARDOUS BUILDING MATERIALS SURVEY conducted by Golder Associates Ltd. Dated April 18th,2007 for details.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

**F2020.09 Other Hazardous Materials - \***

Please see HAZARDOUS BUILDING MATERIALS SURVEY conducted by Golder Associates Ltd. Dated April 18th,2007 for details.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08

**S8 FUNCTIONAL ASSESSMENT****K4010.01 Barrier Free Route: Parking to Entrance - \***

A handicapped parking space is provided. Barrier free access from the parking area to the secondary gym entrance is currently provided on the south elevation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	0	OCT-08

**Event: Install a ramp at the main east entrance****Concern:**

Access is not provided to the main school entrance.

**Recommendation:**

Modify existing entrance to accommodate a ramp.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$35,000	Low

**Updated:** OCT-08

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

No automatic door entrances are provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	0	OCT-08

**Event: Provided power operators for barrier free access at the main entrance of the building.****Concern:**

No automatic access is currently provided from any exterior entrance doors.

**Recommendation:**

Provided power operators for barrier free access at the main entrance of the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$4,000	Low

**Updated:** OCT-08

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

Barrier free access is provided to most areas, including the gym via an interior ramp, however access is not provided to the stage area currently used as a computer room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	0	OCT-08

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

Designated barrier free washrooms are provided opposite the gymnasium.

<b><u>Rating</u></b>	<b><u>Installed</u></b>	<b><u>Design Life</u></b>	<b><u>Updated</u></b>
4 - Acceptable	1982	0	OCT-08