

RECAPP Facility Evaluation Report

Fort McMurray S Dist #2833



Westwood Community High School

B3440A
Fort McMurray

Facility Details	
Building Name:	Westwood Community High
Address:	221 Tundra Drive
Location:	Fort McMurray
Building Id:	B3440A
Gross Area (sq. m):	11,424.77
Replacement Cost:	\$41,103,525
Construction Year:	1985

Evaluation Details	
Evaluation Company:	Burgess Bredo Architect Ltd.
Evaluation Date:	August 26 2010
Evaluator Name:	Mr. Burgess Bredo

Total Maintenance Events Next 5 years: \$14,301,000
5 year Facility Condition Index (FCI): 34.79%

General Summary:

In 1985 the original 14,565.0 sq.m. two storey building was constructed. The school occupies 10,390.67 sq.m. of the original building while the YMCA occupies the balance. The YMCA portion of the building and site was not evaluated. In 1993 unheated addition of 45 sq.m. for outdoor storage was added to south side of school. In 2008 an addition totaling 78 sq.m. was constructed on the south side of the school to act as a link to new portables. In 2008 four portables with washrooms totaling 547.0 sq. m. were relocated from another school to south side. In 2009 sloped glazing over streets was replaced with clerestory glazing. In 2009 addition of 8.4 sq.m. was added to each floor adjacent main entrance. In 2010 six portable totaling 670.0 sq. m. was constructed at south side of school. Current gross area of the school is 11,747.47 sq. m. The student capacity is 1,135. The school serves grades 8-12 .

The school district plans to increase school to grades 7-12 in Fall 2011.

Structural Summary:

Steel framed two storey structure bearing on perimeter grade beams, interior grade beams and concrete basement walls, all bearing on drilled concrete piles. concrete slab on grade in areas with balance being precast concrete slabs on grade.

Structure is in good condition.

Envelope Summary:

Exterior walls are typically cavity walls with colored concrete block over insulation, vapour barrier and concrete block back-up. Windows are aluminum framed with double glazed sealed units. Exterior doors include aluminum entrances, steel storefronts, glazed utility doors and non-glazed utility doors set in pressed steel frames. Insulated metal overhead doors are also provided. Original roof is a protected membrane design while 2009 clerestory has SBS roofing. There is sloped glazing in a number of areas are a number of original acrylic skylights.

Windows require replacement. Steel storefront doors and utility doors should be replaced. Balance of original BUR roofing requires replacement.

Building envelope is in good condition.

Interior Summary:

Partitions are a combination of concrete block and metal studs/gypsum board with a fabric partition to subdivide the gym. Interior doors are hollow metal and solid core wood set in pressed steel frames. There is a variety of visual display boards with metal toilet partitions and metal lockers. Acoustic panels are provided in the music room and interior walls are typically painted but there are ceramic wall tiles in washrooms. Floor finishes include wood flooring replaced in 2008, vinyl tile, sheet vinyl, ceramic tile and a limited amount of carpet of varying ages. Ceiling finishes include gypsum board and acoustic panels in T-bar grid. Casework is typically painted finish with plastic laminate countertops of varying ages.

Ceramic tile flooring requires repair while carpet requires replacement. Measures taken to improve barrier free access include a separate washroom. Other than exterior asbestos panels and vinyl asbestos floor tiles, no hazardous materials were observed or reported.

Selected millwork requires replacement or repair. Barrier free issues include non-complying ramps to gym, music room and theater, washroom vanities and power door operators. Interior systems are in good condition.

Mechanical Summary:

Hot water heating in building through perimeter fin tube radiation, unit heaters, and force flow units. Original four heating boilers replaced in 2007 with three new forced draft boilers. Six medium pressure ventilation air systems provides conditioned air to terminal boxes. One low pressure ventilation air system provides conditioned air to gymnasium. Air conditioning provided via chilled water chiller and roof mounted cooling tower. Original chiller replaced in 2005. Domestic water provided from heat exchanger connected to heating boilers and water storage tank. Controls are pneumatic and BMCS installed in 2005. Mixture of roof mounted and in-line exhaust fans. Plumbing fixtures and brass are commercial quality. Fire protection consists of sprinkler system and fire extinguishers.

Projects include replacing of terminal boxes, provision of approved backflow preventor to sprinkler system, replacing of isolating valves on hot water heating system, and study to resolve complaint of poor ventilation to library.

Mechanical system in acceptable condition.

Electrical Summary:

Main transformer is owned by the Utility Company. 1600A-600/347V/3PH/4W main power service complete with step down transformers and 120/208V/3PH/4W distribution panelboards located throughout school. Most lighting upgraded to T8 fluorescent lamps with electronic ballasts in 2002. Motor control centers provided for motor loads. Two variable frequency drive starter units provided in 2005. Original fire alarm panel replaced in 2005 with a Simplex main fire alarm panel. Original Edwards fire alarm devices remain in service. Video surveillance system provided to building in 2005. Diesel emergency generator providing power to emergency lighting in building.

Electrical installation 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* - 1985 Section

Perimeter and interior grade beams bearing on drilled concrete piles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

Event: Completed - Study Cracking in Exterior Walls.

Concern:

Vertical cracks at concrete block cladding at a number of locations.

Recommendation:

Study causes of cracking in exterior walls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2010	\$3,000	Low

Updated: JAN-11

A1010 Standard Foundations* - 1993 Section

Concrete grade beams bearing on strip footings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1993	0	JAN-11

A1010 Standard Foundations* - 2008

Concrete grade beams bearing on drilled concrete piles at small additions in 2008 and 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	0	JAN-11

A1030 Slab on Grade* - 1985 Section

Concrete slab on grade at basement and portions of theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

A1030 Slab on Grade* - 1993 Section

Concrete slab on grade at small 1993 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1993	100	JAN-11

A1030 Slab on Grade* - 2008

Concrete slab on grade at small addition in 2008 and 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	100	JAN-11

A1030 Slab on Grade* - Precast

Precast concrete hollow core slabs acting as floor slab and bearing on grade beams at portions of main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

A2020 Basement Walls (& Crawl Space)*

Concrete basement wall bearing on drilled piles. Drawings indicate rigid insulation on outside face.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1010.01 Floor Structural Frame (Building Frame)* - 1985 Section

Suspended second floor, mechanical rooms, and floor over basement is steel OWSJ bearing on steel beams/columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1010.01 Floor Structural Frame (Building Frame)* - 2009 Section

Suspended second floor addition is steel framed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	0	JAN-11

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

Limited number of concrete block bearing walls support floors and roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1010.03 Floor Decks, Slabs, and Toppings* - 1985 Section

Metal deck with concrete topping at second floor assembly and at mechanical rooms. Concrete topping over precast concrete hollow core floor slabs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1010.03 Floor Decks, Slabs, and Toppings* - 2009 Section

Metal deck with concrete topping at second floor assembly in small 2009 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	0	JAN-11

B1010.07 Exterior Stairs*

Cast in place concrete stairs at south entrances and south east exit from theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1010.10 Floor Construction Firestopping*

Suspended floor slabs are fire stopped.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1020.01 Roof Structural Frame* - 1985 Section

OWSJ bearing on steel beams/columns.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B1020.01 Roof Structural Frame* - 2009

Steel framed clerestory roof structure added over streets in 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	0	JAN-11

B1020.04 Canopies*

Steel framed canopies bearing on steel columns added at two north entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	0	JAN-11

S2 ENVELOPE

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

Integrally coloured and textured concrete block used as outer wythe in exterior cavity walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

Event: Repair Cracked Concrete Blocks.

Concern:

Cracks in concrete blocks at base of walls at a few locations around building.

Recommendation:

Repair cracked concrete blocking by replacing or filling cracks. Monitor walls annually for further cracking.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2012	\$3,000	Low

Updated: JAN-11

B2010.01.06.03 Metal Siding** - 1985 Section

Prefinished metal siding used where mechanical rooms extend above adjacent roofs and in select location at main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	40	JAN-11

Event: Replace 1985 Section Metal Siding (170 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$69,000	Unassigned

Updated: JAN-11

B2010.01.06.03 Metal Siding** - 1993 Section

Prefinished metal siding on small 1993 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1993	40	JAN-11

Event: Replace 1993 Metal Siding (70 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$28,500	Unassigned

Updated: JAN-11

B2010.01.09 Expansion Control: Exterior Wall Skin*

Periodic control joints in concrete block cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

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

Control joints and joints between dissimilar materials caulked

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	20	JAN-11

Event: Cut Out and Replace Caulking (10, 390 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$41,000	Unassigned

Updated: JAN-11

B2010.02.03 Masonry Units: Ext. Wall Const.* - Concrete Blocks

Concrete block as inner wythe of exterior cavity walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B2010.02.03 Masonry Units: Ext. Wall Const.* - Glass Blocks

Glass block in exterior wall adjacent entrance and in stairwells.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B2010.02.04 Load-Bearing-Metal Studs: Ext. Wall*

Metal studs around mechanical rooms at roof level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

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

Wood wall and roof framing at addition over exterior concrete bleachers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	0	JAN-11

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

Drawings indicate rigid insulation and vapour barrier within cavity wall construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B2010.06 Exterior Louvers, Grilles, and Screens*

Painted metal louvres throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

B2010.09 Exterior Soffits*

Prefinished suspended linear metal soffits at entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

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

Aluminum framed windows with hopper vent along the bottom; double glazed sealed units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	40	JAN-11

Event: Replace Aluminum Windows (182 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$280,000	Unassigned

Updated: JAN-11

B2020.03 Glazed Curtain Wall - 1985 Section**

Aluminum framed curtain wall forming walls and roof at West entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Repair Curtain Wall at West Entrance

Concern:

Damages to curtain wall are unsightly.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2012	\$1,000	Low

Updated: JAN-11



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Event: Replace Curtain Wall at West Entrance (37 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$72,000	Unassigned

Updated: JAN-11

B2020.03 Glazed Curtain Wall - 2009**

Aluminum framed curtain wall systems complete with vision and spandrel panels added over streets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	40	JAN-11

Event: Replace 2009 Glazed Curtain Wall (670 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2049	\$1,300,000	Unassigned

Updated: JAN-11

B2030.01.01 Aluminum-Framed Storefronts: Doors - 1985 Section**

Aluminum entrance doors at west entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	30	JAN-11

Event: Replace 1985 Section Aluminum Entrances (2 doors)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$8,800	Unassigned

Updated: JAN-11

B2030.01.01 Aluminum-Framed Storefronts: Doors - 2009**

Aluminum framed storefronts at north entrances replaced in 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	30	JAN-11

Event: Replace 2009 Aluminum Entrances (5 doors).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$22,000	Unassigned

Updated: JAN-11

B2030.01.02 Steel-Framed Storefronts: Doors**

Steel framed storefronts at South entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	30	JAN-11

Event: Replace Steel-Framed Storefronts (2 doors).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$6,500	Unassigned

Updated: JAN-11

B2030.02 Exterior Utility Doors - 1985 Section**

Glazed and non-glazed exterior utility doors at exits and miscellaneous locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Replace Exterior Utility Doors (21 doors).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$29,000	Unassigned

Updated: JAN-11

B2030.02 Exterior Utility Doors - 2008 Section**

Glazed exterior utility doors at exit in 2008 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	40	JAN-11

Event: Replace Glazed Exterior Utility Doors (2 doors)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2048	\$3,200	Unassigned

Updated: JAN-11

B2030.03 Large Exterior Special Doors (Overhead)* - 1985 Section

Insulated aluminum shutters at CTS workshop and receiving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B2030.03 Large Exterior Special Doors (Overhead)* - 1995

Aluminum overhead doors added at two locations on south side.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1995	0	JAN-11

B3010.01 Deck Vapor Retarder and Insulation* - 1985 Section

Rigid insulation over inverted membrane roofing in 1985 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B3010.01 Deck Vapor Retarder and Insulation* - 2008 Section

Rigid insulation and vapour retarder on roof assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	0	JAN-11

B3010.01 Deck Vapor Retarder and Insulation* - 2009

Rigid insulation and vapour retarder on new roof at clerestory windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	0	JAN-11

B3010.04.04 Modified Bituminous Membrane Roofing (SBS) - 2008**

SBS membrane roofing over small addition as link to portables.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	25	JAN-11

Event: Replace 2008 SBS Roofing Membrane (78 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$19,000	Unassigned

Updated: JAN-11

B3010.04.04 Modified Bituminous Membrane Roofing (SBS) - 2009**

SBS roofing membrane on small 2008 addition. SBS roofing membrane on clerestory windows over streets and new canopies in 2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	25	JAN-11

Event: Replace 2009 SBS Roofing Membrane (960 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2034	\$235,000	Unassigned

Updated: JAN-11

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

Inverted and protected membrane roofing in 1985 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Original Inverted Roofing Membrane (5,807 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,534,000	Unassigned

Updated: JAN-11

B3010.07 Sheet Metal Roofing - 1993 Section**

Prefinished metal roofing at 1993 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1993	40	JAN-11

Event: Replace 1993 Section Metal Roofing (62 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$25,200	Unassigned

Updated: JAN-11

B3010.08.02 Metal Gutters and Downspouts**

Prefinished metal gutters and downspouts at 1993 Section.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	JAN-11

Event: Replace Metal Gutters and Downspouts (25 meters)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$1,000	Unassigned

Updated: JAN-11

B3010.09 Roof Specialties and Accessories*

Roof areas accessed by doors from mechanical rooms and an assortment of metal ladders and steps between different roof levels. Concrete sidewalk pads provided as walkways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

B3020.01 Skylights - 1985 Acrylic Domes**

Double acrylic dome set in aluminum frame and set on base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	25	JAN-11

Event: Replace Acrylic Domes with Roofing (62.7 sq.m.).

Concern:

Acrylic domes have a history of leaking. Leaks have damaged gypsum board finishes below.

Recommendation:

Replace acrylic domes. School district wishes to remove domes and roof over the opening.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$80,000	Medium

Updated: JAN-11



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B3020.01 Skylights - Acrylic Domes Replaced**

Double acrylic dome set in aluminum frame and set on base. Half of the skylights were removed and roofed over in 2009. This is a completed event. The domes have been removed and the openings roofed over. This technical can be removed from ReCAPP system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2009	25	JAN-11

Event: Completed - Replace Acrylic Skylights (8 domes).

Concern:

Acrylic domes have a history of leaking. Leaks have damaged gypsum board finishes below.

Recommendation:

Replace acrylic domes. School district wishes to remove domes and roof over the opening.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$80,000	High

Updated: JAN-11

B3020.01 Skylights - Atria**

Sloped skylights over two atria are small pyramids in shape. Double glazed sealed units set in aluminum curtain wall type framing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	25	JAN-11

Event: Replace Skylights over Atria (62.8 sq.m.).

Concern:

Skylights are leaking in places and damaging finishes below.

Recommendation:

Replace skylights over atria with new skylights of similar shape (2 skylights @ 32 sq m each).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2013	\$205,000	Medium

Updated: JAN-11

B3020.01 Skylights - Shed**

Three small areas of sloped skylights are simple shed. Double glazed sealed units set in aluminum curtain wall type framing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	JAN-11

Event: Replace Shed Style Skylights (32 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$104,300	Unassigned

Updated: JAN-11

B3020.01 Skylights - Streets**

Large area of sloped skylights over interior streets below. Double glazed sealed units set in aluminum curtain wall type frames. Skylight removed during 2009 renovation. This technical can be removed from ReCAPP system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
1 - Critical	1985	25	JAN-11

Event: Complete - Study Skylights over Streets.

Concern:

Very large skylight with significant and persistent leaks since building was occupied. Mould detected in ceiling space below.

Recommendation:

School board would prefer solid roof with clerestory windows. Study the range of repair and replacement options to develop a preferred course of action. Develop more accurate costing and include remedial work to finishes.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2010	\$25,000	High

Updated: JAN-11

Event: Completed - Replace Skylight over Streets (1,800 sq.m.).

Concern:

Very large skylight with significant and persistent leaks since building was occupied. Mould detected in ceiling space below.

Recommendation:

Replace skylight over streets. Skylight is 1,400 sq m plus 400 sq m of end walls. cost based on Alberta Infrastructure report and should include remedial work to finishes below.

Consequences of Deferral:

Health issue.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$9,000,000	High

Updated: JAN-11



Oily slick on glazing related to caulking failure.

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

Roof hatch provided to roof area over House B.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Concrete block and metal stud/gypsum board partitions used throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

C1010.03 Interior Operable Folding Panel Partitions**

Folding panel partitions between two classrooms in two locations on second floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	30	JAN-11

Event: Replace Two Operable Folding Panel Partitions (35 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$64,000	Unassigned

Updated: JAN-11

C1010.04 Interior Balustrades and Screens, Interior Railings*

Metal railing balustrade at upper lobby and atria.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	0	JAN-11

Event: Add Pickets to Balustrades (24 meters)

Concern:

Openings between pickets of 270 mm would not comply to current code maximum of 100 mm.

Recommendation:

Balustrades are too far apart, add more balustrades.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2011	\$6,000	Low

Updated: JAN-11

C1010.05 Interior Windows*

Tempered glass set in pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1010.06 Interior Glazed Partitions and Storefronts*

Tempered glass and hollow metal doors set in pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1010.07 Interior Partition Firestopping*

Structure, ductwork, and conduit penetrate fire partitions throughout. Insulating material used to seal flutes in metal deck where it passes over partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

Event: Repair Fire Stopping

Concern:

Openings in fire separations have not been properly firestopped. May be due to subsequent renovations.

Recommendation:

Firestopping at all fire rated partitions.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Repair	2011	\$3,800	Low

Updated: JAN-11

C1010.08 Other Partitions*

Suspended fabric curtain divides the gym into two teaching spaces. Concrete block partitions used as toilet partitions in student washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

C1020.01 Interior Swinging Doors (& Hardware)*

Hollow metal and solid core wood set in pressed steel frames throughout. Some doors have tempered glazing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1020.02 Interior Entrance Doors*

Glazed hollow metal doors set in pressed steel frames at vestibules.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

C1020.03 Interior Fire Doors*

Hollow metal doors set in rated pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1020.04 Interior Sliding and Folding Doors*

Metal folding door at fume hood in science prep room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1020.07 Other Interior Doors*

Large swinging metal grille doors in street at YMCA portion and in cafeteria.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

C1030.01 Visual Display Boards**

Whiteboards and tackboards throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	20	JAN-11

Event: Replace Visual Display Boards (210 boards)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$192,000	Unassigned

Updated: JAN-11

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

Floor supported metal toilet partitions in staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	30	JAN-11

Event: Replace Toilet Partitions (4 cubicles)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$7,000	Unassigned

Updated: JAN-11

C1030.06 Handrails*

Wood handrail on both sides of ramp down to theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1030.08 Interior Identifying Devices*

Plastic lamicaid signage throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C1030.10 Lockers**

Metal lockers built into alcoves in most areas. Metal lockers with sloped tops adjacent cafetorium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Metal Lockers (1,499).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$1,220,000	Unassigned

Updated: JAN-11

C1030.12 Storage Shelving*

Clear finish wood and metal shelving used throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial grade mirrors, soap dispensers, toilet tissue holders and paper towel dispenser/disposal in all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

C2010 Stair Construction*

Cast in place concrete treads, risers, and landings in theatre areas. Steel framed treads, risers, and landings filled with concrete at all remaining stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

C2020.01 Tile Stair Finishes*

Quarry tile finish on treads and landings on most stairs. Painted steel risers at some stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

C2020.06 Carpet Stair Finishes**

Carpet floor finish on concrete stairs in theatre area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	10	JAN-11

Event: Replace Carpet on Stairs (10 treads).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$1,400	Unassigned

Updated: JAN-11

C2020.08 Stair Railings and Balustrades*

Metal railings and balustrades at open stairs. Openings between railings approximately 130 mm. Would not comply to current code maximum on 100 mm. Metal handrails on both sides of stairs which are enclosed by walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

C2020.11 Other Stair Finishes*

Unpainted concrete at exit stairs from gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

C3010.02 Wall Paneling**

Wood strips applied over insulation on back wall of theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	30	JAN-11

Event: Replace Wall Paneling (85 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$12,000	Unassigned

Updated: JAN-11

C3010.06 Tile Wall Finishes**

Ceramic tile in staff washrooms and student washroom cubicles. Ceramic tile also used on valences in student washrooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	40	JAN-11

Event: Replace Wall Tiles (480 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$170,000	Unassigned

Updated: JAN-11

C3010.09 Acoustical Wall Treatment**

Fabric over acoustic insulation in music room. Wood battens over acoustic insulation on back wall of theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	20	JAN-11

Event: Replace Acoustic Wall Treatment (155 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$54,000	Unassigned

Updated: JAN-11

C3010.11 Interior Wall Painting*

Selected concrete block and all metal stud partitions are painted. Interior walls have been re-painted as an on-going program from 2006-2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	0	JAN-11

Event: Completed - Repaint Interior Wall Surfaces (20,000 sq.m.).

Concern:

Paint surfaces are damaged and yellowing throughout.

Recommendation:

Repaint wall surfaces.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$630,000	Low

Updated: JAN-11

C3020.02 Tile Floor Finishes - 2008**

Ceramic floor tile added to staff lounge in 2008.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2008	50	JAN-11

Event: Replace 2008 Ceramic Floor Tile (120 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2058	\$28,000	Unassigned

Updated: JAN-11

C3020.02 Tile Floor Finishes - Ceramic Mosaic Tile**

Ceramic mosaic tile in kitchen and food prep, areas adjacent cafeteria.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	50	JAN-11

Event: Replace Ceramic Mosaic Floor Tile (195 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$45,600	Unassigned

Updated: JAN-11

C3020.02 Tile Floor Finishes - Quarry Tile**

Quarry tile flooring on main floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	50	JAN-11

Event: Repair Floor Tiles (2.0 sq.m.).

Concern:

Floor tiles are cracked and damaged in a number of areas. Likely due to glue / mortar voids below tiles.

Recommendation:

Repair and replace damaged floor tiles in streets.



Cracked and damaged floor tiles in streets.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2011	\$3,000	Low

Updated: JAN-11

Event: Replace Quarry Tile Flooring in Streets (1,255 sq.m.)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$295,000	Unassigned

Updated: JAN-11

C3020.04 Wood Flooring**

Sprung hardwood flooring in gym has been reported in 2009 at cost of \$ 800, 000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	30	JAN-11

Event: Completed - Replace Hardwood Flooring (1,126 sq.m.).

Concern:

Water damage to hardwood flooring in gym due to leaking skylights above. Wood is warping and cracking.

Recommendation:

Replace hardwood floor along northern section of gym.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$800,000	Low

Updated: JAN-11

Event: Replace Hardwood Flooring in Gym (1,126sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2039	\$800,000	Unassigned

Updated: JAN-11

C3020.07 Resilient Flooring - 1985**

Original sheet vinyl flooring in main floor CTS rooms and classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	20	JAN-11

Event: Replace 1985 Sheet Vinyl Flooring (515 sq.m.).

Concern:

Sheet vinyl flooring CTS rooms and two classrooms is damaged and badly marked.

Recommendation:

Replace sheet vinyl flooring.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$58,000	Low

Updated: JAN-11

C3020.07 Resilient Flooring - 2009**

Original flooring in administration reception area and corridor replaced with sheet vinyl.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	20	JAN-11

Event: Replace 2009 Sheet Vinyl Flooring (132 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2029	\$14,800	Unassigned

Updated: JAN-11

C3020.07 Resilient Flooring - Classrooms**

Original carpet flooring in classrooms have been replaced with sheet vinyl in most classrooms as an on-going program from 2006-2009.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	20	JAN-11

Event: Replace 2007 Sheet Vinyl Flooring (2,070 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2027	\$146,000	Unassigned

Updated: JAN-11

C3020.07 Resilient Flooring - Rubber**

Sheet rubber flooring at second floor lobby.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	20	JAN-11

Event: Replace Rubber Flooring (60 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$8,000	Unassigned

Updated: JAN-11

C3020.07 Resilient Flooring - Vinyl Tile**

Original vinyl tile flooring still in place in cafetorium and selected service rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	20	JAN-11

Event: Replace 1985 Vinyl Tile Flooring (645 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$46,000	Unassigned

Updated: JAN-11

C3020.08 Carpet Flooring - Classrooms**

Original carpet flooring remains in a few classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	15	JAN-11

Event: Replace 1985 Carpet in Classrooms (460 sq.m.).

Concern:

Carpet is worn and stained. Inappropriate floor finish for high traffic areas.

Recommendation:

Replace carpet in classrooms with sheet vinyl.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$42,000	Low

Updated: JAN-11

C3020.08 Carpet Flooring - Library**

Original flooring in library replaced with carpet.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1995	15	JAN-11

Event: Replace 1995 Carpet in Library and Administration (308 sq.m.).

Concern:

Carpet is worn and stained in a number of areas.

Recommendation:

Replace carpet in library and administration offices.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2012	\$28,000	Low

Updated: JAN-11

C3020.11 Floor Painting*

Game lines painted on hardwood flooring in gym. Plywood floor in band room is painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	0	JAN-11

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

Acoustic panels set in suspended T-bar grid in rooms throughout the school. Classrooms have T-bar grid with gypsum board bulkhead border. Unusual grid size of 500x1500 mm.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	25	JAN-11

Event: Replace Acoustic Ceiling Panels (5,400 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$333,000	Unassigned

Updated: JAN-11

C3030.07 Interior Ceiling Painting*

All gypsum board ceilings painted. Painted exposed steel structure and metal deck in gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D1010.01.02 Hydraulic Passenger Elevators**

Dover 2,500 lbs hydraulic elevator between main and second floors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	30	JAN-11

Event: Replace Hydraulic Passenger Elevator.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$130,000	Unassigned

Updated: JAN-11

S4 MECHANICAL

D2010.04 Sinks**

Floor mounted janitor sinks, cast iron janitor sinks in arts room, 1/2 bradley, stainless steel sinks in science rooms, and stainless steel counter sinks mixture of single and two compartment. Total of 8 janitor sinks and 35 stainless steel sinks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Sinks (43)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$100,000	Unassigned

Updated: JAN-11

D2010.05 Showers**

Two fiberglass showers and one tiled shower.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Showers (3)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$9,000	Unassigned

Updated: JAN-11

D2010.08 Drinking Fountains/Coolers**

Semi-recessed stainless steel and china non-refrigerated drinking fountains and one free standing refrigerated drinking fountain.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	JAN-11

Event: Replace Non-Refrigerated Drinking Fountain (3) and Refrigerated Drinking Fountain (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$12,000	Unassigned

Updated: JAN-11

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

Floor mounted water closets some tank type and some with flush valves, wall hung urinals with flush valves, mixture of recess mounted and wall hung china lavatories. Total 31 water closets with flush valves, 2 tank type water closets, 8 urinals, and 40 lavatories.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	JAN-11

Event: Replace Washroom Fixtures (81)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$185,000	Unassigned

Updated: JAN-11

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D2020.01.02 Valves: Domestic Water**

Shut off valves to water service, domestic hot water tank, domestic hot water boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Replace Domestic Water Valves (40)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$64,000	Unassigned

Updated: JAN-11

D2020.01.03 Piping Specialties (Backflow Preventors)**

Installed on heating system make up, condenser water make up.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	20	JAN-11

Event: Provide Backflow Preventor on Sprinkler Line (1)

Concern:

Sprinkler line does not contain approved backflow preventor.

Recommendation:

Provide backflow preventor to comply with code.

Consequences of Deferral:

Possible potable water contamination.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2011	\$7,500	High

Updated: JAN-11

Event: Replace Backflow Preventors (3)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$12,600	Unassigned

Updated: JAN-11

D2020.02.02 Plumbing Pumps: Domestic Water**

Inline system domestic hot water recirculation pump. Inline recirculation pump between storage tank and heat exchangers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	20	JAN-11

Event: Replace Domestic Water Pumps (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$6,500	Unassigned

Updated: JAN-11

D2020.02.03 Water Storage Tanks**

Domestic hot water storage tank in Mechanical Room 119.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Domestic Water Storage Tank (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$35,000	Unassigned

Updated: JAN-11

D2020.02.06 Domestic Water Heaters**

Electric domestic water heater for instructors office washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	20	JAN-11

Event: Replace Domestic Hot Water Heater (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$1,900	Unassigned

Updated: JAN-11

D2020.03 Water Supply Insulation: Domestic*

Domestic hot, cold, recirculation piping insulated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D2030.01 Waste and Vent Piping*

Cast iron, copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D2040.01 Rain Water Drainage Piping Systems*

Rain water leaders connected to underground storm. Several roof drains for minor roof areas discharge to grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D2040.02.04 Roof Drains*

Inverted roof drains suitable for inverted roof system complete with flow control weirs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3010.02 Gas Supply Systems*

Gas distribution piping to heating boilers, Industrial Arts make up air unit, kitchen range, science rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

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

One Volcano boiler, forced draft, water tube, 497 KW input - services disconnected, no longer in service, and left in place. Three Cleaver Brooks model M5W-6000 forced draft boilers, 1759 KW input each. Boilers complete with safety and operating controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	35	JAN-11

Event: Completed - Replace heating boilers.

Concern:

Two stage control. Boiler casing has hot spots indicating deteriorated refractory lining.

Recommendation:

Replace heating boilers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$600,000	Medium

Updated: JAN-11

Event: Replace Heating Boilers (3)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2042	\$600,000	Unassigned

Updated: JAN-11

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

Common Class A chimney for three boilers. Combustion air provided via natural draft louvre and make up air unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	JAN-11

Event: Replace Chimneys (36 meters)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$31,500	Unassigned

Updated: JAN-11

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

Side stream filter, chemical pot feeder.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3030.02 Centrifugal Water Chillers**

Original Trane chiller taken out of service. McQuay Chiller Model WHR110D-W installed in 2005 to take over building cooling load.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	25	JAN-11

Event: Replace Centrifugal Water Chiller (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$630,000	Unassigned

Updated: JAN-11

D3030.05 Cooling Towers**

Roof mounted cooling tower.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	JAN-11

Event: Completed - Recondition cooling tower.

Concern:

Tower basins has green scum and tubelits are plugged.
Intake louvre blades require replacement.

Recommendation:

Recondition cooling tower.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2010	\$30,000	High

Updated: JAN-11

Event: Replace Cooling Tower (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$240,000	Unassigned

Updated: JAN-11

D3030.08 Other Refrigeration Systems*

Kitchen freezer and cooler with air cooled compressors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3040.01.01 Air Handling Units: Air Distribution - 1985 Section**

Six Trane air systems of similar configuration. Built up air systems consists of fresh air louvre, fresh, return, exhaust air dampers, filter bank, glycol heating coil, chilled water cooling coil, humidifier grid, supply fan with inlet vanes, medium velocity ductwork distribution to terminal boxes, ceiling return air, return air fan with inlet vanes. Exhaust air relieved into penthouse. Motorized exhaust air damper on roof exhaust hood. Air system #5 (lower house A) 4,796 l/s supply, 4,568 l/s return; air system #6 (upper house A) 13,210 l/s supply, 13,210 l/s return; air system #9 (cafeteria) 7,788 l/s supply; 7,788 l/s return; air system #10 (theater) 3,528 l/s supply, 3,528 l/s return; air system #11 (house C) 9,440 l/s supply, 9,440 l/s return; air system #12 (house B) 11,585 l/s supply, 11,585 l/s return.

Gymnasium air system consists of fresh air louvre, fresh air, return, exhaust air dampers, filter bank, glycol heating coil, chilled water cooling coil, humidifier grid, supply fan, low velocity ductwork distribution, ducted return air, return air fan. Exhaust air relieved into penthouse. Motorized exhaust air damper on roof exhaust hood. Air system #7: 14,200 l/s supply 14,200 l/s return.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Add Air Handling Unit to Library (1)

Concern:

Poor ventilation to library.

Recommendation:

Add new air handling unit to service library.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2011	\$150,000	Medium

Updated: JAN-11

Event: Replace Air Handling Units (6)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$900,000	Unassigned

Updated: JAN-11

Event: Study Poor Air Ventilation to Library

Concern:

Complaints of poor ventilation and control to library.

Recommendation:

Conduct study to review air ventilation to library.

Consequences of Deferral:

Comfort concern.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2011	\$15,000	Medium

Updated: JAN-11

D3040.01.01 Air Handling Units: Air Distribution - Boiler Room**

Boiler room. Ventilation unit consists of fresh air, return air dampers, 50 mm throw away filter, supply fan.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Air Handling Unit (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$10,000	Unassigned

Updated: JAN-11

D3040.01.01 Air Handling Units: Air Distribution - Industrial Arts**

Industrial Arts ceiling mounted Engineered Air pendant hung packaged make up air system. Consists of fresh air damper, 50 mm throw away filter, indirect fired heat exchanger, supply fan, low velocity ductwork distribution.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Air Handling Unit (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$20,000	Unassigned

Updated: JAN-11

D3040.01.04 Ducts: Air Distribution*

Seven air systems complete with medium pressure galvanized ductwork to terminal boxes. Two air systems complete with low velocity galvanized ductwork to air distribution outlets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3040.01.06 Air Terminal Units: Air Distribution (VAV/CV Box)**

Variable volume boxes. Original boxes complete with circulation fan and return air openings (approximately 120 boxes).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	30	JAN-11

Event: Install new terminal boxes (120)

Concern:

Original terminal boxes have circulation fan removed and return air openings capped off. Could not determine if boxes are variable or constant volume.

Recommendation:

Install new terminal boxes.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$275,000	Medium

Updated: JAN-11

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Supply air outlets vary as to type. Directional supply air diffusers, square diffusers, round diffusers, adjustable and linear bar grilles. Egg crate and linear bar return grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3040.03.01 Hot Water Distribution Systems**

Two primary inline circulation pumps circulate water via black iron piping to heating boilers. Two secondary inline circulation pumps circulate hot water via black iron piping to radiation, unit heaters, entrance heaters. Two secondary inline circulation pumps circulate hot water via black iron piping to two glycol heat exchangers (water in shell, glycol in tubes) provided for seven (7) air system heating coils. In line circulation pump provided at each heat exchanger to circulate glycol to air systems heating coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	40	JAN-11

Event: Replace Heating Valves (200)

Concern:

Heating isolating valves are no longer in operating order. Many valves seized and no longer operate as intended.

Recommendation:

Replace valves with new.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2011	\$200,000	High

Updated: JAN-11

Event: Replace Hot Water Distribution System (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$1,400,000	Unassigned

Updated: JAN-11

D3040.04.01 Fans: Exhaust**

Mixture of dome, cabinet, and centrifugal roof mounted exhaust fans, in-line exhaust fans, and residential range hood over ranges in home economics classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Exhaust Fans (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$235,000	Unassigned

Updated: JAN-11

D3040.04.03 Ducts: Exhaust*

Low velocity exhaust air ductwork connected to exhaust air outlets and fans. Balancing dampers provided in branch line ducts. Fire dampers installed in duct/rated wall penetrations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3040.04.05 Air Outlets and Inlets: Exhaust*

Egg crate, linear bar exhaust grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D3040.05 Heat Exchangers**

Two shell and tube heat exchangers for domestic hot water, and two shell and tube glycol heat exchangers for air system heating coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Heat Exchangers (4)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$100,000	Unassigned

Updated: JAN-11

D3050.01.01 Computer Room Air Conditioning Units**

Computer rooms provided with water cooled ceiling mounted recirculation air units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Computer Room Air Conditioning Units (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$50,000	Unassigned

Updated: JAN-11

D3050.05.02 Fan Coil Units**

Ceiling mounted and wall fan coil units installed in main and secondary entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Fan Coil Units (4)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$30,000	Unassigned

Updated: JAN-11

D3050.05.03 Finned Tube Radiation**

Rooms with exterior walls provided with wall fin radiation installed within enclosure and millwork. Wall fin radiation installed in hallways, skylights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Replace Finned Tube Radiation (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$700,000	Unassigned

Updated: JAN-11

D3050.05.06 Unit Heaters**

Vertical unit heaters installed in mechanical room and Industrial Arts. Horizontal unit heaters installed in fan rooms, industrial arts, loading dock.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Unit Heaters (6)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$45,000	Unassigned

Updated: JAN-11

D3060.02.01 Electric and Electronic Controls**

Electric controls to force flow units and unit heaters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Electric and Electronic Controls (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$25,000	Unassigned

Updated: JAN-11

D3060.02.02 Pneumatic Controls**

Duplex air compressor complete with automatic drain. Refrigerated air dryer, day/night pneumatic room thermostats, control valves, damper motors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Replace Pneumatic Controls (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$85,000	Unassigned

Updated: JAN-11

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

2005 - Johnson Controls BMCS installed in 2005. System controls equipment activation and assists in maintaining building environment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	20	JAN-11

Event: Replace Building Systems Controls (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$300,000	Unassigned

Updated: JAN-11

D4010 Sprinklers: Fire Protection*

Wet sprinkler system with siamese connection at building exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC fire extinguishers installed in cabinets and wall brackets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

S5 ELECTRICAL

D5010.02 Secondary Electrical Transformers (Interior)**

Dry type 600-120/208V/3PH/4W setdown transformers located throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Replace Secondary Interior Electrical Transformers (4)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$80,000	Unassigned

Updated: JAN-11

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

Main 1600A 600/347V/3PH/4W main power distribution switchboard located in electrical room in YMCA. Switchboard made by Federal Pioneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	40	JAN-11

Event: Replace Main Electrical Switchboard (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2025	\$175,000	Unassigned

Updated: JAN-11

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

120/208V/3PH/4W and 600/347V/3PH/4W panelboards located throughout building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Branch Circuit Panelboards (30)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$195,000	Unassigned

Updated: JAN-11

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

Multi-section Square D motor control centers located in mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Motor Control Centers (4)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$280,000	Unassigned

Updated: JAN-11

D5010.07.03 Variable Frequency Drives**

VFD drive installed to fans on air handling unit in mechanical penthouse room 254.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	30	JAN-11

Event: Replace Variable Frequency Drive (2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$40,000	Unassigned

Updated: JAN-11

D5020.01 Electrical Branch Wiring*

Wiring installed in conduit, ivory devices with stainless steel coverplates.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5020.02.01 Lighting Accessories: Interior (Lighting Controls)*

Low voltage and line voltage switching. Each room has it own light switch. Dimming system provided to theatre lights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5020.02.02.02 Interior Fluorescent Fixtures**

Mixture of indirected, strip, recess mounted, and surface mounted light fixtures in building retrofitted to T8 lamps with electronic ballasts in 2002.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Interior Fluorescent Fixtures (2200)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$715,000	Unassigned

Updated: JAN-11

D5020.02.02.03 Interior Metal Halide Fixtures*

Recess metal halide pot lights in main lobby corridors and pendant hung metal halide lights in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5020.02.03.03 Exit Signs*

LED type exit signs located at exit doors and in paths to exits, connected to building emergency power system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D5020.02.05 Special Purpose Lighting*

Incandescent lighting in theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Wall mounted HPS light fixtures installed along perimeter of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

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

Exterior lighting photocell controlled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5030.01 Detection and Fire Alarm**

Simplex main fire alarm control panel with Edwards alarm bells and fire detection devices. Fire alarm panel replaced in 2007.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	JAN-11

Event: Replace Fire Alarm System (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2014	\$400,000	Unassigned

Updated: JAN-11

D5030.02.02 Intrusion Detection**

DSC security system complete with multiple alarm keypads at entrance doors, motion sensors, and door contacts. System is monitored by monitoring company.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	25	JAN-11

Event: Replace Instruction Detection System (10,390.67 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$150,000	Unassigned

Updated: JAN-11

D5030.02.04 Video Surveillance**

Surveillance cameras installed along building perimeter and in building corridors. System new in 2005 and is a networked system by Flaman Security Systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2005	25	JAN-11

Event: Replace ideo Surveillance (20 Cameras)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$170,000	Unassigned

Updated: JAN-11

D5030.03 Clock and Program Systems*

Digital type clocks in most rooms. Some wall mounted clocks in corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D5030.04.01 Telephone Systems*

100 mm main service conduit with telephone cables to basic Nortel telephone system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5030.04.02 Paging Systems*

Paging system over telephone system via speakers in corridors and classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D5030.04.04 Data Systems*

Cat 5 data system installed to central hub.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

D5030.06 Television Systems*

Cable TV provided to building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

D5090.02 Packaged Engine Generator Systems (Emergency Power System)**

275 KW, 347/600V/3PH/4W diesel fueled emergency generator located in separate room in YMCA.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	JAN-11

Event: Replace Emergency Generator (1)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$275,000	Unassigned

Updated: JAN-11

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theater and Stage Equipment*

Curtain cyclorama and stage lighting at theatre stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

E1020.07 Laboratory Equipment*

Fume hoods in chemistry lab and science prep room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

E1090.03 Food Service Equipment*

Commercial grade food service equipment in cafetorium kitchen. Equipment includes griddles, range, fryers, pizza oven, dishwasher and display cases.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

E1090.04 Residential Equipment*

Residential refrigerator and microwave ovens in staff lounge. Residential clothes washer and dryer, refrigerators and stoves in CTS kitchen.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Four ceiling hung and two wall mounted Plexiglas basketball backboards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

E2010.02 Fixed Casework - 1985 Section**

Educational: clear finish wood with plastic laminate clad countertops in most classrooms; acid resistant countertops over MCP casework in science labs.

Library: plastic laminate clad countertops and casework at circulation desk in library.

Kitchen: limited plastic laminate clad casework and countertops in cafetorium kitchen.

Other: clear finish wood display cases with sliding glass doors, plastics laminate clad vanities in washrooms. GFA costs for casework replacement have been reduced by other even costs under E2010.02.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	35	JAN-11

Event: Replace 1985 Section Casework (10, 390 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$982,000	Unassigned

Updated: JAN-11

E2010.02 Fixed Casework - Art Room**

Plastic laminate clad countertops over clear finish wood casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	35	JAN-11

Event: Replace casework in art room (5 meters)

Concern:

Poor and inappropriate finish on casework below sink in art room. Leading to deterioration of wood components.

Recommendation:

Replace casework in art room with more durable casework.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$8,000	Low

Updated: JAN-11



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E2010.02 Fixed Casework - CTS Shops**

Galvanized sheet metal countertops over clear finish wood casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1985	0	JAN-11

Event: Replace Millwork in CTS Shop (24 meters).

Concern:

Significant damage to some millwork in CTS shops. Water damage as well. Clear finish millwork as inappropriate for this environment.

Recommendation:

Replace casework and countertops in CTS shops with more durable casework.



Stained and damaged casework.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$46,000	Medium

Updated: JAN-11

E2010.02 Fixed Casework - Computer Lab**

Plastic laminate clad countertops over clear wood casework at work stations in computer lab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2006	35	JAN-11

Event: Replace Casework in Computer Labs (48 meters)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2041	\$66,000	Unassigned

Updated: JAN-11

E2010.02 Fixed Casework - Home Economics**

Plastic laminate clad countertops over clear wood casework at new islands in Home Economics. MCP casework at student kitchens countertops replaced. Costs based on upper cabinets (45 meters), lower MCP cabinets (48 meters) and islands (8 meters).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	35	JAN-11

Event: Replace Casework in Home Economics (50 meters)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2045	\$146,000	Unassigned

Updated: JAN-11

E2010.02 Fixed Casework - Reception**

Reception counter in administration area replaced in 2009 with plastic laminate clad countertops and casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2009	35	JAN-11

Event: Replace Reception Room Casework (12 meters)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2044	\$21,000	Unassigned

Updated: JAN-11

E2010.03.01 Blinds**

Vertical louvre blinds throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Window Blinds (182 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$30,000	Unassigned

Updated: JAN-11

E2010.05 Fixed Multiple Seating**

Upholstered seating in theatre; seating capacity of approximately 165.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	35	JAN-11

Event: Replace Holstered Theatre Seating (165 capacity)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$98,000	Unassigned

Updated: JAN-11

E2010.06 Fixed Interior Landscaping*

Trees and shrubs in street adjacent cafeteria.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	FEB-06

E2020 Moveable Furnishings

Wood desks for teachers in classrooms. Wood and metal student desks in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	0	JAN-11

F1010.02.04 Portable and Mobile Buildings - South Far Group**

General: Group of six portables with link located on the south side of the school in 2010 and totaling approximately 670 sq.m. Year of construction reported to be 2010. These portables are not yet shown on the mini plans.

Structural: Wood framed walls, floor and roof at both portables and link. Steel perimeter beams below the floor assembly bear on concrete piles.

Envelope: Metal siding exterior finish with EPDM roof membrane, aluminum windows and glazed hollow metal exterior doors. Steel and wood steps at exit at end of link.

Interior: Partitions are wood frame and gypsum board. Finishes include painted walls, acoustic ceilings and sheet vinyl flooring. Metal venetian blinds at windows; whiteboards and tackboards.

Mechanical: Furnace room in classroom, two classrooms with Payne natural gas fired furnaces, and four with Keeprights natural gas fired furnaces. Each furnace has a humidifier, mixing box with fresh air intake, and DX cooling coil and connected to American Standard condensing units on roof. Ventilation through ductwork in ceiling space and square diffusers. Wall mounted ABC type multi-purpose fire extinguisher in cabinet.

Electrical: Recess mounted fluorescent light fixtures with T8 lamps and electronic ballasts, recessed paging speaker, DC emergency lighting, heat detector and fire pull station, 120/240V/1PH/3W panelboard in classroom, and wall mounted clock.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2010	30	JAN-11

Event: Building Envelope - Add Metal Rolling Shutters Over Windows (9).

Concern:

Windows facing baseball diamond are prone to breakage.

Recommendation:

Add metal rolling shutters over windows facing west.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2011	\$13,500	Low

Updated: JAN-11

Event: Building Envelope - Replace Siding (370 sq.m.), Windows (58 sq.m.) and Roofing (670 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2038	\$422,700	Unassigned

Updated: JAN-11

Event: Electrical - Replace Electrical Systems (670 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2040	\$201,000	Unassigned

Updated: JAN-11

Event: Interior - Replace Doors (8), Visual Display Boards (48), Sheet Vinyl (670 sq.m.), Acoustic Ceilings (670 sq.m.) and Window Blinds (24 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2030	\$183,400	Unassigned

Updated: JAN-11

Event: Mechanical - Replace Furnace and Air Conditioning Unit (6).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$120,000	Unassigned

Updated: JAN-11

F1010.02.04 Portable and Mobile Buildings - South Near Group**

General: Group of four portables with link located on the south side of the school in 2008 and totaling approximately 546 sq.m. Year of construction reported to be 2008. These portables are numbered P1 through P4 on the mini plans. Group also has two washrooms and two small storage rooms.

Structural: Wood framed walls, floor and roof at both portables and link. Steel perimeter beams below the floor assembly bear on concrete piles.

Envelope: Metal siding exterior finish with EPDM roof membrane, aluminum windows and glazed hollow metal exterior doors. Steel and wood steps at exit at end of link.

Interior: Partitions are wood frame and gypsum board. Finishes include painted walls, acoustic ceilings and sheet vinyl flooring. Clear finish wood millwork in classrooms and at coat hooks in the link. Metal venetian blinds at windows; metal toilet partitions, metal lockers, whiteboards and tackboards. Portables facing baseball diamond to the west have been fitted with metal rolling shutters over windows.

Mechanical: One forced air furnace providing heat to washrooms and janitor room. Two roof top mounted Carrier HVAC units with one unit serving two classrooms. Two washrooms each with exhaust fan, tank type water closets, and recessed enameled steel lavatory. Floor mounted janitor sink in janitor room. ABC type multi-purpose fire extinguishers on in recess mounted cabinets.

Electrical: Recess mounted fluorescent light fixtures with T8 lamps and electronic ballasts, recessed paging speaker, DC emergency lighting, heat detector and fire pull station, 120/240V/1PH/3W panelboard in classroom, and wall mounted clock.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	30	JAN-11

Event: Building Envelope - replace siding (260 sq.m.), windows (34 sq.m.) and roofing (546 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2038	\$286,900	Unassigned

Updated: JAN-11

Event: Electrical - Replace Electrical Systems (546 sq.m./gfa)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2038	\$163,800	Unassigned

Updated: JAN-11

Event: Interior: replace doors (12), visual display boards (20), toilet partitions (7 cubicles), sheet vinyl (546 sq.m.), lockers (67), acoustic ceilings (546 sq.m.), millwork (28 meters) and window blinds (24 sq.m.).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2028	\$229,300	Unassigned

Updated: JAN-11

Event: Mechanical - Replace Furnace (1) and HVAC Units (2).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2033	\$55,000	Unassigned

Updated: JAN-11

F1010.02.05 Grandstands and Bleachers**

Retractable metal and wood bleachers seating approximately 880 in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	30	JAN-11

Event: Replace Retractable Bleachers in Gym (880 capacity).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$286,000	Unassigned

Updated: JAN-11

F1020.02 Special Purpose Rooms

Two darkrooms located in CTS area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1985	50	FEB-06

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Designated BFA parking provided. Distance to building is longer than preferred.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	FEB-06

K4010.02 Barrier Free Entrances*

Main entrance adjacent drop off driveway, and east entrance adjacent parking should be barrier free. Power door operators provided at West entrance shared with YMCA.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	0	JAN-11

Event: Provide Power Door Operators (2 doors).

Concern:

Power door operator provided adjacent bus drop off but not provided at East entrance.

Recommendation:

Provide power door operators at East entrances.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$8,400	Low

Updated: JAN-11

K4010.03 Barrier Free Interior Circulation*

Access required to all teaching spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	0	JAN-11

Event: Improve Access to Teaching Spaces.

Concern:

Ramps provided to gym and theatre are approximately 1:8 where current standards require 1:12. Steps down to music room.

Recommendation:

Improve access to all teaching spaces by adding LULA elevation to gym (\$80,000) and wheel chair lifts to theatre and music room (\$70,000).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$150,000	Medium

Updated: JAN-11

Event: Replace Door Locksets with Lever Design (165 doors).

Concern:

Doors have round knobs on locksets and latchsets where lever design required for barrier free access.

Recommendation:

Replace door locksets with lever design (165 doors).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$70,000	Low

Updated: JAN-11

Event: Upgrade Access to Public Counters (2)

Concern:

Public counters in excess of 2.0 m require a lower portion complete with knee well for barrier free access. Not provided at reception room and library counters.

Recommendation:

Upgrade public counters by introducing a lower section complete with knee well.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$4,000	Low

Updated: JAN-11

K4010.04 Barrier Free Washrooms*

BFA washrooms for each sex should be provided on each floor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1985	0	JAN-11

Event: Upgrade Washrooms to BFA Standards (8 washrooms).

Concern:

One grab bar provided in each cubicle where two are required. 680 mm clearance below vanities where 735 mm is required. 760 mm door to BFA cubicle where 800 mm clearance is required. Mirror at 1140 above floor where 1000 mm maximum is permitted.

Recommendation:

Upgrade BFA washroom by adding grab bars, notching vanity, lowering a portion of the mirror and providing a wider door to cubicles.



BFA cubicle missing grab bar over toilet.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2011	\$24,000	Low

Updated: JAN-11

K4020.03 Other Codes* - Second Floor Exits

Code analysis not undertaken at this time but exiting from second floor is suspect.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1985	0	JAN-11

Event: Enclose Stairs at West End of Second Floor.

Concern:

Two exits are required from each floor area. West half of second floor has three stairs. All three of these stairs are not enclosed and do not lead to an exterior door. Travel distances may exceed maximum permitted.

Recommendation:

Enclose stair at West end of second floor with direct access to exterior.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Repair	2011	\$100,000	High

Updated: JAN-11

Event: Study egress from Second Floor

Concern:

Code requires that each floor area have 2 exits including one that leads directly outside. Second floor has 2 enclosed stair and 4 open stairs exiting into the street. Only one enclosed stair exits directly outside.

Recommendation:

Study egress from second floor.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2010	\$10,000	High

Updated: JAN-11

K4030.01 Asbestos*

No asbestos issues known or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

K4030.02 PCBs*

No PCB's known or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

K4030.04 Mould*

Mould was detected in ceiling space below leaking skylights, but has been abated. No mould was observed or reported.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1985	0	JAN-11

Event: Complete - Assess Mould in Building.

Concern:

Uncertainty as to locations, quantities and types of mould present.

Recommendation:

Undertake study to assess presence of mould in building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2010	\$15,000	High

Updated: JAN-11

Event: Completed - Abate Mould in Areas Below Leaking Skylights.

Concern:

Mould has been detected in one ceiling space below leaking skylights. Reasonable to suspect that mould is present in other areas below leaking skylights.

Recommendation:

Abate mould in remaining areas below leaking skylights (1,850 sq m). Mould abatement to occur during Christmas holidays 2005 will cost \$100,000 for an area approximatley 185 sq m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Hazardous Material Management Upgrade	2010	\$150,000	High

Updated: JAN-11

K4030.09 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	1985	0	JAN-11

K5010 Reports and Studies* - Plans

Facility was evaluated on August 26, 2010 by Burgess Bredo Architect Ltd. The building has an area of 11,747 sq.m. which includes 10 portables in two groups. The total area of the portables is 1,217 sq.m. All areas of the site and school were evaluated.

In 1985 the original 14,565.0 sq.m. two storey building was constructed.

The school occupies 10,390.67 sq.m. of the original building while the YMCA occupies the balance. The YMCA portion of the building and site was not evaluated.

In 1993 unheated addition of 45 sq.m. for outdoor storage was added to south side of school.

In 2008 an addition totaling 78 sq.m. was constructed on the south side of the school to act as a link to new portables.

In 2008 four portables with washrooms totaling 547.0 sq. m. were relocated from another school to south side.

In 2009 sloped glazing over streets was replaced with clerestory glazing.

In 2009 addition of 8.4 sq.m. was added to each floor adjacent main entrance.

In 2010 six portable totaling 670.0 sq. m. was constructed at south side of school.

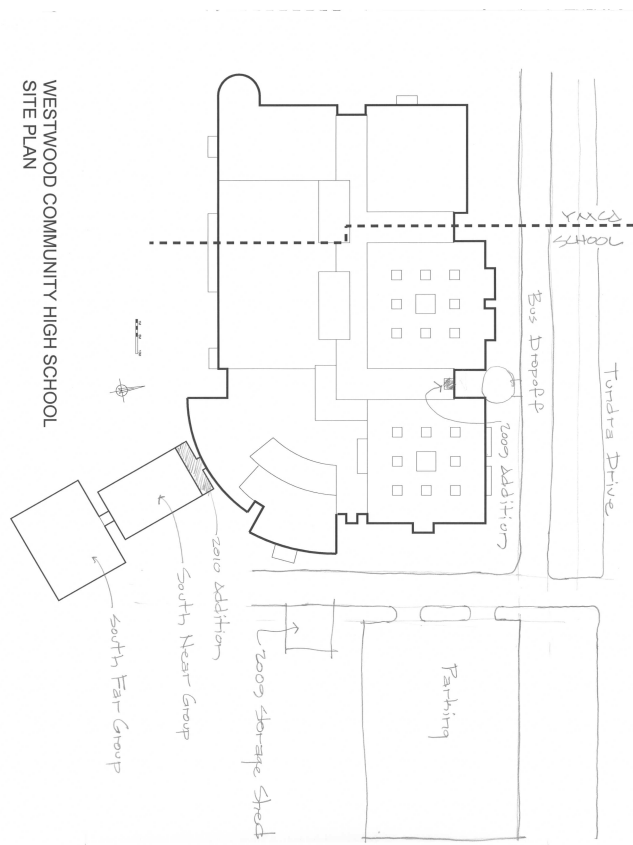
Current gross area of the school is 11,747.47 sq. m.

The student capacity is 1,135.

The school serves grades 8-12 .

The school district plans to increase school to grades 7-12 in Fall 2011.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	JAN-11



Site plan supplied by School District.